House of Commons

Treasury Committee

Financial Stability and Transparency

Sixth Report of Session 2007–08

HC 371

House of Commons

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Report, together with formal minutes

Ordered by the House of Commons to be printed Tuesday 26 February 2008

HC 371
Published Monday 3 March 2008
by authority of the House of Commons
London: The Stationery Office Limited
£0.00

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Summary

Overview

The period since early August 2007 has been one of large-scale turbulence and instability in global financial markets, following the revelation by a French bank, BNP Paribas, that its investment funds could no longer value their exposures to sub–prime mortgage loans in the United States. We examine the causes of the dislocation of international financial markets that surfaced on 9 August 2007, subsequent developments in global financial markets and lessons learnt, as well as the prospects for international action and other developments to promote financial stability and transparency.

The new financial structure

The last few years have witnessed the dramatic growth of markets in asset-backed securities, alongside the shift towards an originate and distribute model of banking, where loans are made and then securitised and sold on to investors. These developments have increased the efficiency of financial markets and allowed for the greater dispersal of risk through the financial system. However, the market turbulence since mid-2007 has illuminated some serious flaws in the new financial structure. These include: growing product complexity and looser under-writing standards, as well as increased uncertainty about where risk ultimately lay within the system. Whilst the move towards an originate and distribute model will not be reversed, market participants and regulatory authorities must learn the appropriate lessons from events since mid-2007 onwards.

Investors

It is clear that the search for yield and short–termism encouraged many investors to invest in high–yielding and increasingly complex products that it turns out they did not always fully understand. We are concerned that some investors were seduced into such investments by the promise of high returns without adequate consideration of the associated risks. In addition, many investors did not exercise sufficient due diligence on the products they invested in and appear to have been overly-reliant on the credit rating agencies, often using ratings as a green light to invest. Going forward, investors must take responsibility for what they buy and the decisions they make.

The credit rating agencies

The credit rating agencies have played a central role in the growth of securitised markets. The problems affecting financial markets since early August 2007 have highlighted inherent and multiple conflicts of interest in the credit rating agencies business model as well as flaws in their rating methods. The credit rating agencies must tackle these perceived conflicts of interest as a matter of urgency if they are to regain the trust and confidence of market participants and the public. If they are unable to put their house in order, then new regulation may be the only answer.

Heeding the warnings

The public authorities in the United Kingdom as well as the key global financial institutions had been pointing for some time prior to the middle of 2007 to a serious under-pricing of risk, as well the risks of impaired market liquidity. In retrospect, it is clear that some market participants did not heed these warnings and that the framework for issuing warnings of potential problems needs strengthening. We recommend that, in future, when issuing warnings of potential problems, the Bank of England and Financial Services Authority should clearly highlight the two or three most important risks in a short covering letter to financial institutions, for discussion at Board level. The Bank and Financial Services Authority should seek confirmation that these warnings have been properly considered, and publish commentaries on the responses received.

1 Introduction and overview

The origins of the current crisis

1. On 9 August 2007, the French bank BNP Paribas announced that three of its investment funds were no longer able to value a series of complex financial instruments backed by so-called "sub–prime" residential mortgages in the United States.[1] This was the culmination of a series of announcements reflecting a growing loss of confidence among banks in Europe and the United States about their investments linked to the riskier lending in the US property market. It set off a chain of events, including a crisis of confidence in financial markets across the world, turbulence on stock markets, the run on Northern Rock, and a squeeze on credit and a crisis of confidence with a significant impact on the real economy. In a previous Report we considered the run on Northern Rock, its immediate causes, its consequences, and future arrangements for the management of systemic financial risks associated with retail banks.[2] In this Report, we examine the causes of the dislocation of international financial markets that surfaced on 9 August 2007, subsequent developments in global financial markets and the prospects for international action and other developments to promote financial stability and transparency. **The unfolding crisis of confidence is important to keep in mind because of its widespread impact on financial markets, its particular impact on the United Kingdom via Northern Rock, and its emerging impact on the real economy.**

Conduct of our inquiry

2. We have previously described the conduct of our inquiry into financial stability and transparency.[3] The oral and written evidence that we received between September 2007 and January 2008 has already been published with our previous Report.[4] In addition to that evidence, our inquiry has also benefited from the Chairman's participation in an Inter-Parliamentary Conference on Crisis Management and Financial Markets organised by the Economic and Monetary Affairs Committee of the European Parliament which took place in Brussels on 22 and 23 January 2008. We are grateful to all those who assisted us in the course of our inquiry, and in particular to Professor Geoffrey Wood of CASS Business School, City University, for his specialist advice.

Financial stability and why it matters

3. The clearest definition of financial stability is that used by the Swedish financial authorities who describe financial stability as meaning "the ability of the financial system to

[1] Speech by the Governor of the Bank of England at the Northern Ireland Chamber of Commerce and Industry, Belfast, 9 October 2007, pp2-3; BNP Paribas, press release, 9 August 2007

[2] Treasury Committee, Fifth Report of Session 2007–08, *The run on the Rock*, HC 56–I

[3] *Ibid.*, paras 2–5

[4] HC (2007–08) 56–II. All references to oral evidence (in the form Q … or Qq …) or to written evidence (in the form Ev) are to such evidence published in that Volume unless otherwise stated.

maintain its basic functions without disruptions that entail significant economic costs.[5] When we first took evidence in February 2007 from representatives of the "Tripartite authorities" with responsibility for financial stability in the United Kingdom—HM Treasury, the Financial Services Authority (FSA) and the Bank of England—Mr Jon Cunliffe, then Managing Director, International Finance, HM Treasury, defined financial stability by reference to the objective of "seeking to ensure that the financial system can operate, can play the role that it needs to play in the economy as a whole".[6] Sir John Gieve, Deputy Governor of the Bank of England, told us that it was actually easier to define financial instability than financial stability, and went on to state that

> the instability that we are concerned about is a loss of functionality in the financial system which would damage the wider economy because it no longer functioned to bring savings and investment into balance or to transmit money effectively round the system.[7]

4. On that occasion, Mr Hector Sants, then Managing Director, Wholesale Business Unit and Institutional Markets, FSA, and currently the FSA's Chief Executive, drew a distinction between threats of financial instability relating to "risks to market infrastructure"—for example, as a result of terrorism or a pandemic—and "financial market risks".[8] In this Report, we are largely concerned with the latter—in other words, with instability arising from within financial markets.

5. The definitions that we have cited above draw attention not simply to the internal functioning of financial markets, but to the impact on the wider economy of financial instability. Financial instability of the kind that has been experienced since early August 2007 affects the capacity and willingness of lending institutions to provide credit to businesses and individuals, the spreads on such credit and the conditions attached to credit. Financial instability also imposes a more direct price on those with financial investments, including those with long-term investments such as holdings in pension funds. The period of turbulence in financial markets, and especially credit markets, since August 2007, and its potential impact on people in general and the real economy, has propelled the issue of financial stability to the top of the agenda, not just of supervisory authorities, but of public policy makers more generally. It has highlighted the importance of maintaining financial stability and the cost to people and the economy of financial instability.

6. One problem with defining financial stability in terms of the basic functions of the financial system, as defined by the Sweden Authorities, is that these basic functions often differ across time as well as across countries. Thus, it may also prove useful to look at the issue in terms of the impact of financial instability, which Professor Wood explained:

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[5] Memorandum of Understanding between the Government offices (Ministry of Finance, Sveriges Riksbank and Finansinspektionen) regarding cooperation in the fields of financial stability and crisis management, June 2005, p 1

[6] Treasury Committee, Oral evidence, Thursday 1 February 2007, *Financial Stability*, HC 292–i, Q 14

[7] *Ibid.*

[8] *Ibid.*

> as episodes in which a large number of parties, whether they are households, companies, or (individual) governments, experience financial crises which are not warranted by their previous behaviour, and where these crises collectively have seriously adverse macro-economic effects.[9]

7. **The market turbulence since August 2007 has propelled the issue of financial stability to the top of the political agenda. The terms "financial stability" and "serious threat to financial stability" are used in the Banking (Special Provisions) Act without a legal definition. There is a continuing lack of clarity about what is meant by financial stability as well as what events constitutes a "serious threat to financial stability". We believe there is a need for clarity from the Tripartite authorities about how they define financial stability so that stakeholder can assess whether particular events constitute a threat to financial stability. This clarification should be in advance of Parliamentary consideration of the Banking Reform Bill. Such a step would ensure that policy interventions to maintain financial stability would in future take place against a more objective backdrop and would be particularly important in aiding the work of the tripartite authorities in promoting financial stability.**

The international dimension

8. In our previous Report we were concerned with the impact of financial instability on one United Kingdom institution—Northern Rock—and on the British banking system. Although some of the effects of the market instability since August have been peculiar to the United Kingdom, it is evident that the instability with which we are concerned is an international phenomenon. As we will see, its trigger lies to a significant extent in developments in the United States, most notably in the growing linkage between the markets for complex financial instruments and the US market in "sub–prime" mortgages. Banks in Germany and France were affected by these developments before British banks.

9. In July 2006, we referred to the possible risks to the world economy associated with "global imbalances", in other words with the continued rapid growth in Asian economies not being off-set by an appreciation of Asian currencies against the US dollar.[10] Since then the rapid rise in the value of oil has exacerbated these imbalances, and countries which have them now also include the major oil-exporting countries. Despite continuing concerns about these imbalances, it is notable that the current period of instability has its origins firmly in the most developed markets, most notably that of the United States. The Governor of the Bank of England drew attention to this feature of the current period of instability, telling us in December:

> I think the problems we are facing are international in nature … It has been a very salutary lesson, because this crisis has become international in nature. It is not a crisis of emerging market economies or failed macro-economic policies in the rest of the

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[9] *Defining and Achieving Financial Stability,* William A. Allen and Geoffrey Wood, Cass Business School, City University

[10] Treasury Committee, Ninth Report of Session 2005–06, *Globalisation: the role of the IMF*, HC 875, paras 6–8

> world, this crisis goes right to the heart of the financial centres of the three big developed parts of the world.[11]

The international nature of the recent problems reflects the global nature of financial markets and the instantaneous nature of world communications, which make national borders largely irrelevant to the transmission of some shocks. In this Report, we examine the international dimension of the problems, and the international dimension of possible solutions.

[11] Q 1697

2 Changes in financial markets

The economic backdrop—the 'great moderation'

10. The period since the economic downturn of the early 1990s, which affected almost all developed countries, came to be known as the 'great moderation' in the United States and the 'great stability' in the United Kingdom.[12] This 'great stability' was described by Professor Willem Buiter, from the London School of Economics, as being characterised by low and stable global inflation, as well as high and stable global real GDP growth over the past decade.[13]

11. Another striking feature of the global macroeconomic environment, according to Professor Buiter, was the declining level of real interest rates, and specifically the marked decline since the bursting of the so-called 'technology bubble' at the end of 2000.[14] Professor Buiter explained that the proximate determinant of the trend decline in real interest rates was "an ex-ante savings glut, caused by the rapid growth of new emerging markets like China, which have extraordinarily high propensities to save" as well as more recently "the global redistribution of wealth and income towards a limited number of producers of primary energy sources (especially oil and natural gas) and raw materials".[15]

12. The Governor of the Bank of England concurred with Professor Buiter's explanation for the declining and low level of real interest rates, stating in his 9 October 2007 speech in Belfast that prevailing low real interest rates were primarily caused by high rates of saving in other parts of the world:

> The primary explanation is the high rates of saving in other parts of the world. Japan has been a net saver for more than a quarter of a century. Following the Asian crisis in the mid–1990s, many of Japan's neighbours also raised their national saving rates. That group includes the country which is now the world's biggest saver—China. And more recently, after the tripling of oil prices, they have all been joined by the oil-producing nations from Saudi Arabia to Norway.[16]

The Governor went on to explain that savings from these countries flooded into world capital markets with the consequence that borrowers were able to attract long–term loans at remarkably low interest rates. These low interest rates encouraged borrowing and spending (and reduced saving) in much of the developed world, resulting in large and expanding trade deficits. The Governor noted that, in order to keep overall demand

[12] Treasury Committee, Fourth Report of Session 2006-07: *The Monetary Policy Committee of the Bank of England: ten years on*, HC 299–II, Ev 15

[13] Ev 315

[14] Ev 319

[15] *Ibid.*

[16] Speech by the Governor of the Bank of England at the Northern Ireland Chamber of Commerce and industry, Belfast, 9 October 2007, pp 2–3

growing and inflation stable, in the face of these trade deficits, central banks in the developed world responded by keeping official short-term interest rates low.

The 'search for yield'

13. These low official interest rates helped depress interest rates on low-risk assets such as government debt and encouraged investors to search for investment options that offered a higher yield, a phenomenon sometimes referred to as the 'search for yield'. Jeremy Palmer, Chairman and Chief Executive, Europe, Middle East and Africa, UBS, noted that "over the past few years, as is now well known, we have lived through a period of stability and low interest rates which has led investors to search for high yield".[17] The Governor of the Bank of England explained the consequences of this 'search for yield' in his speech in October 2007:

> the price was unusually low interest rates—both short and long–term—which were considerably below the levels to which most investors had become accustomed in their working lives. Dissatisfaction with these rates gave birth to the 'search for yield'. This desire for higher yields could not be met by traditional investment opportunities. So it led to a demand for innovative, and inevitably riskier, financial instruments and for greater leverage. And the financial sector responded to the challenge by providing ever more sophisticated ways of increasing yields by taking more risk.[18]

14. The generally benign macroeconomic environment combined with low real interest rates and the subsequent 'search for yield' has provided the backdrop to a number of important developments in financial markets over the last decade and a half. Two of the most important developments have been the rise of new actors in financial markets and the growth of new and more complex financial instruments and markets, both of which we discuss below.

15. **The 'search for yield' has spawned the growth of complex new financial instruments as well as new types of institutional investors. This 'search for yield' encouraged many investors to invest in high-yielding complex products that it turns out they did not always fully understand and is at the heart of the problems which have affected financial markets from mid-2007 onwards. We discuss the consequences for financial stability of this 'search for yield' in greater detail later in this Report.**

Rise of alternative capital pools

Overview

16. The economic backdrop and, in particular, the 'search for yield' phenomenon and the global redistribution of income described earlier in this chapter, has led to the rise of

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[17] Q 1153

[18] Speech by the Governor of the Bank of England at the Northern Ireland Chamber of Commerce and Industry, Belfast, 9 October 2007, pp 2–3

alternative pools of capital. These alternative pools of capital, primarily hedge funds, private equity funds and sovereign wealth funds, have emerged as important actors in global financial markets and in the economies of developed countries, including the UK.[19]

Hedge funds

17. There is no legal or regulatory definition of a hedge fund in the UK and the range of funds covered by the term is very wide. The term hedge fund was originally used to describe a type of private investment fund that charged investors a performance fee, used leverage to magnify returns and short selling to limit market risk. This description still fits many hedge funds, but by no means all.[20]

18. The number of hedge funds has grown significantly over the last decade with an estimated 9,800 hedge funds operating globally by the end of 2006. These funds have attracted strong inflows of capital over the last decade, with assets managed by hedge funds totalling US $1.4 trillion at the end of 2006. The growth of hedge funds over this period has been attributed by the Reserve Bank of Australia to the prevailing low interest rate environment which the Reserve Bank says "may also have encouraged a shift in investments towards hedge funds as, in the past, hedge funds have achieved higher average returns than traditionally managed investments, albeit in exchange for greater risk".[21]

19. The active investment approach of hedge funds means that they account for a high proportion of market activity. For instance, hedge fund trading activity was estimated to account for around 40%-50% of daily turnover on the New York Stock Exchange and London Stock Exchange in 2005.[22] Hedge funds are also significant investors in structured credit markets. Hedge funds operate under conditions of reduced disclosure and oversight compared to many other institutional investors and, whilst often managed on-shore, are usually based off-shore, although hedge fund managers in the United Kingdom are subject to regulation by the FSA in respect of their governance and market conduct.[23]

20. **The increased prominence of hedge funds makes it important to analyse the role they play in financial markets. We intend to examine the role of hedge funds as part of our ongoing work on financial stability and transparency.**

Private equity

21. The term 'private equity', meaning the equity financing of companies not quoted on the stock market, covers a wide range of businesses, from small venture capital firms to large portfolio companies. Private equity deals tend to be of two general types: management buy–outs and management buy–ins. In the former case the existing

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[19] World Economic Forum, *Global risks 2008: A global risk networking report,* p 9

[20] Hedge Funds Standards: consultation paper, Part 1: Approach to best practice in context, Appendix C, p 33

[21] Reserve Bank of Australia, *Statement on Monetary Policy,* February 2005, p 25

[22] Bank of England, *Financial Stability Report,* April 2007, Box 5, p 36

[23] *Ibid.*

management raise the funding to take a company private and in the latter management comes from outside. Some private equity deals, principally those that involve management buy-ins, have generated considerable controversy. We started an inquiry on private equity during the first half of 2007, publishing an interim Report in July 2007.

22. The private equity industry has grown strongly in recent years, with the value of private equity funds in the UK trebling between 2003 and 2006. The UK is the largest market for private equity outside the USA, accounting for over half of total European private equity investment in 2005. As we noted in our Report on private equity, private equity deals until mid-2007 had been increasingly characterised by a high degree of leverage, which we argued then had been facilitated by the benign macroeconomic environment and the extremely low price of credit, reflecting factors such as low interest rates, lower default rates by companies and lower compensation for liquidity risk as well as the increase in liquidity in the leveraged loan market as a result of the development and deepening of secondary markets for such loans.[24] The benign environment until August 2007 facilitated a rising number of takeovers of very large companies by private equity firms, with the purchase of Alliance Boots in May 2007 for £11 billion being the first takeover of a FTSE 100 company by a private equity firm.

23. At the larger end of the private equity market, private equity represents an alternative to the listed company model of ownership. Our July 2007 Report discussed the nature of the private equity industry and the differences between the private equity and the Public Limited Company model. We concluded that there were benefits and potential problems associated with both private equity and Public Limited Company ownership and that different forms of ownership might be appropriate at different times for a particular company.[25]

24. Our Report also discussed possible risks to financial stability posed by recent developments in private equity. We noted that:

> however extensive the due diligence conducted, higher levels of leverage are likely to create additional risk, and … this becomes more significant the more important highly-leveraged firms become in the economy. We also note that the recent increase in the number of highly-leveraged private equity-owned firms has occurred during a period of economic growth and stability, which is not guaranteed to continue. We therefore urge the Bank of England to examine the potential impact of an economic downturn, both on highly-leveraged firms and on the wider economy. We also urge the FSA to investigate the operation of due diligence in highly-leveraged firms.[26]

25. Since we published our Report on private equity in July 2007, Sir David Walker has published his report on guidelines for disclosure and transparency in private equity. [27] The

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[24] Treasury Committee, Tenth Report of Session 2006-07, *Private equity,* HC 567–I, paras 41–42,

[25] *Ibid.*, para 33

[26] *Ibid.*, para 61

[27] *Guidelines for Disclosure and Transparency in Private Equity*, Sir David Walker, November 2007

environment for private equity deals has also deteriorated as a result of developments in the credit markets and the more uncertain macroeconomic outlook.

26. **We are continuing our work on private equity, examining the proposals in Sir David Walker's report as well looking at the impact on private equity of the changing economic environment. We will also continue to explore the implications for financial stability of the growth of private equity in recent years as part of our ongoing work on financial stability and transparency.**

Sovereign wealth funds

27. Sovereign wealth funds, which are State-owned funds accumulated through State trading and investment activities, have risen to prominence as they have started to play an increasingly important role in developed economies, including the UK. Sovereign wealth funds have grown, as was discussed earlier, in response to the global redistribution of wealth and income towards a limited number of producers of primary energy suppliers as well as the rapid growth of new emerging markets such as China with high propensities to save, which has sharply increased the foreign reserves of these countries.

28. The IMF estimated in 2006 that Sovereign wealth funds were worth between \$2 trillion and \$3 trillion and that they would continue to grow by around \$800-\$900 billion per annum.[28] In 2007 China became one of the latest countries to launch a Sovereign Wealth Fund with the establishment of the China Investment Corporation, which it is estimated has about \$200 billion under management. Other countries with Sovereign wealth funds include Kuwait, where the Kuwait Investment Authority, together with the General Reserve Fund, and Future Generations Reserve Fund, has assets estimated at between \$160 billion and \$250 billion; Singapore, where the Government Investment Corporation and Temasek Holding have a combined \$200 billion in assets; Russia, whose Oil Stabilization Fund has approximately \$130 billion in assets; and Saudi Arabia with over \$250 billion in assets.[29]

29. Sovereign wealth funds have played an important role in the aftermath of the financial market turbulence of 2007. Beginning in late 2007 a number of Sovereign wealth funds have invested in financial institutions, primarily the large Wall Street investment banks, which suffered large losses on sub–prime mortgages. These investments in financial services firms, which are described in greater detail in chapter five, have increased the presence of Sovereign wealth funds in the financial services sector of developed economies. This may present a new set of challenges to policymakers, including implications for financial stability. In addition, there is an ongoing debate about whether Sovereign wealth funds have appropriate structures of governance and transparency in place as well as

[28] International Monetary Fund, *Global Financial Stability Report,* October 2007, p 45

[29] IMF, *Global Financial Stability Report,* October 2007, pp 48–49

concerns over possible political intervention and the impact of potential large-scale market moves.[30]

30. **We recognise the important role that Sovereign wealth funds have played in helping to stabilise the financial system through their investments in financial services firms in 2007. However, the increasing prominence of such funds as institutional investors does raise valid public policy questions about governance, transparency and reciprocity. We intend to examine the role of Sovereign wealth funds as part of our ongoing work on financial stability and transparency.**

Off-shore financial centres

31. An IMF working paper, published in April 2007, offers the following definition of an offshore financial centre (OFC):

> An OFC is a country or jurisdiction that provides financial services to non–residents on a scale that is incommensurate with the size and the financing of its domestic economy.[31]

Offshore financial centres have often been linked with the notion of a 'tax haven'. While the low tax environment present in many OFCs is important in explaining their popularity, an IMF background paper outlined other reasons why offshore financial centres might be used by individual financial institutions:

> OFCs can be used for legitimate reasons, taking advantage of: (1) lower explicit taxation and consequentially increased after tax profit; (2) simpler prudential regulatory frameworks that reduce implicit taxation; (3) minimum formalities for incorporation; (4) the existence of adequate legal frameworks that safeguard the integrity of principal-agent relations; (5) the proximity to major economies, or to countries attracting capital inflows; (6) the reputation of specific OFCs, and the specialist services provided; (7) freedom from exchange controls; and (8) a means for safeguarding assets from the impact of litigation etc.
>
> They can also be used for dubious purposes, such as tax evasion and money-laundering, by taking advantage of a higher potential for less transparent operating environments, including a higher level of anonymity, to escape the notice of the law enforcement agencies in the "home" country of the beneficial owner of the funds.[32]

32. One increasing use of offshore financial centres is as the host of a 'special purpose vehicle'. For instance, Granite, the Special Purpose Vehicle of Northern Rock, was located

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[30] Speech by Economic Secretary to the Treasury, Kitty Ussher MP, at the Economist 'London's Financial markets: Where next?' conference, London, 4 December 2007; *Global risks 2008: A global risk networking report,* World Economic Forum, p 9

[31] International Monetary Fund, 'Concept of Offshore Financial Centres: In Search of an Operational Definition', Ahmed Zoromé, IMF Working paper WP/07/87, April 2007

[32] International Monetary Fund, Offshore Financial Centres, IMF Background Paper Prepared by the Monetary and Exchange Affairs Department, June 2000

in the offshore financial centre of Jersey. The IMF explains the advantages of using an OFC as part of a special purpose vehicle:

> One of the most rapidly growing uses of OFCs is the use of special purpose vehicles (SPV) to engage in financial activities in a more favourable tax environment. An onshore corporation establishes an International Business Corporation in an offshore centre to engage in a specific activity. The issuance of asset-backed securities is the most frequently cited activity of SPVs. The onshore corporation may assign a set of assets to the offshore SPV (e.g., a portfolio of mortgages, loans credit card receivables). The SPV then offers a variety of securities to investors based on the underlying assets. The SPV, and hence the onshore parent, benefit from the favourable tax treatment in the OFC. Financial institutions also make use of SPVs to take advantage of less restrictive regulations on their activities. Banks, in particular, use them to raise Tier I capital in the lower tax environments of OFCs. SPVs are also set up by non-bank financial institutions to take advantage of more liberal netting rules than faced in home countries, reducing their capital requirements.[33]

33. These potential uses of offshore financial centres mean that they remain relevant in any discussion of financial stability. There is an element of competition between major financial centres and offshore financial centres around taxation and regulation. As well as this, the links between offshore financial centres, the institutions and entities registered in OFCs, and the financial institutions regulated by UK authorities means that there is the potential for a further opacity to be added to the financial system, as the lines of sight to where economic risk actually lies may be obscured by the link with an offshore financial centre.

34. **We will undertake further work on offshore financial centres in the context of our ongoing scrutiny of financial stability and transparency to seek to ascertain what risk, if any, such entities pose to financial stability in the United Kingdom.**

The growth of global markets in asset-backed securities

35. A number of analysts, including Lucas Papademos, Vice President of the European Central Bank, have linked the 'search for yield' with the growth of global markets in asset-backed securities. Mr Papademos in a speech in December 2007 explained that "in an environment of historically low risk-free asset yields, the 'search for yield' by investors made it necessary to seek and acquire alternative assets offering higher returns but associated with greater risks".[34] This 'search for yield' helped spur the rapid growth of global markets in asset-backed securities, which are securities or bonds backed by the cash flows on underlying loans and other assets, including residential mortgages (known as residential mortgage-backed securities), credit card debt and loans such as those for cars.

[33] International Monetary Fund, Offshore Financial Centres, IMF Background Paper Prepared by the Monetary and Exchange Affairs Department, June 2000

[34] Speech by Lucas Papademos, Vice President of the European Central Bank, at the press briefing on the occasion of the publication of the December 2007 ECBB Financial Stability Review, Frankfurt am Main, 12 December 2007, p 1

This process of creating asset-backed securities or bonds backed by the cash flows on underlying loans and other assets is known as securitisation.

36. Many asset-backed securities have subsequently been turned into structured finance products, which involve the pooling of assets and the subsequent sale to investors of different classes of securities, each with differing risk-return profiles, on the cash flows backed by these pools.[35] Mr Gerald E Corrigan, Managing Director at Goldman Sachs, told us that the driving force behind the growth of markets in structured finance products was the 'search for yield' phenomenon:

> in a very real way the fundamental driving force that goes a considerable distance in explaining the explosion of structured credit products—I agree with that characterisation—was the long period during which there were abundant amounts of liquidity on a worldwide basis and very low nominal and real interest rates. To a significant degree it has been the reach for yield on the part of institutional investors in particular that goes a considerable distance in explaining this very rapid growth of structured credit products.[36]

37. One structured finance product which has grown strongly is collateralised debt obligations (CDOs), which can be defined as securities backed by a portfolio of fixed-income assets that are issued in tranches of varying seniority with different tranches having differing repayment and interest earning streams.[37] The process of creating CDOs works through the purchase of underlying asset-backed securities by other financial institutions, such as managers of collateralised debt obligations (CDOs), which, as the Bank of England describe, "create new and often complex instruments with high embedded leverage, which they sell on".[38] This process adds a further layer of complexity because underlying securities, including asset-backed securities such as residential mortgage-backed securities, investment-grade bonds and leveraged loans, have subsequently been repackaged into new structured finance products such as CDOs.

38. Given the complexity of such instruments, we asked representatives from the investment banks to explain what a CDO and a CDO-squared were. Lord Aldington, Chairman of Deutsche Bank, London Branch, explained to us that he had not "come before this Committee as an expert on CDOs". Lord Aldington, when questioned further as to whether Deutsche Bank was involved in collateralised debt obligations replied that "my organisation is involved in a very broad range of products and I would not claim to be an expert on all of them". Jeremy Palmer told us that "a CDO-squared is a derivative structure designed to give investors exposure to a CDO" whilst Mr Corrigan replied that:

> A CDO carves out of a plain vanilla mortgage-backed security certain credit tranches of that security and reformulates them in what is called a structured credit product

[35] Bank for International Settlements*, The role of ratings in structured finance: issues and implications*, January 2005

[36] Q 1179

[37] *The impact of the financial market disruption on the UK economy,* Speech by Sir John Gieve, to the London Chamber of Commerce and industry, 17 January 2008; IMF, *Global Financial Stability Report*, October 2007, p 110

[38] Bank of England, *Financial Stability Report*, October 2007, p 41, section 3.1

into a particular class of credit standards affecting those particular mortgages, not the full pool of mortgages.[39]

39. **Our inquiry has highlighted the complexity of many new financial instruments, such as Collateralised Debt Obligations. Nevertheless we are surprised that the Chairman of the UK branch of a leading investment bank could not explain to us what a CDO is, a financial product in which he told us that his organisation deals. The fact that senior board members may not have sufficient understanding of products that their organisations are originating and distributing is a major cause for concern. If the creators and originators of complex financial instruments have only a limited understanding of these products then it raises serious questions about how investors in these products can possibly understand such complex products and the risks involved in such investment decisions. We discuss this issue in greater detail later in our Report.**

40. The Bank of England in its October 2007 Financial Stability Report argued that the 'search for yield' was behind rising investor demand for US sub–prime residential mortgage-backed securities as well as leveraged corporate loans and had stimulated a wave of innovation, creating often opaque and complex financial instruments with high embedded leverage. The Bank also attributed the rapid rise in issuance of collateralised debt obligations (CDOs) to this 'search for yield' on the part of investors.[40]

41. According to the Bank of England, the size of the global market in asset-backed securities was estimated at $10.7 trillion at the end of 2006.[41] The market was dominated by securities backed by residential mortgage-backed securities, which were worth $6.5 trillion, with the US market worth $5.8 trillion and the European market $0.7 trillion. The $5.8 trillion US market in residential mortgage-backed securities includes £0.7 trillion of non-agency sub–prime mortgages, which are mortgages held by sub–prime borrowers (who do not meet prime market standards because they are perceived as a relatively bad credit risk to the lender). Such sub–prime mortgages represented around 6.5% of the market for securitised assets. A total of $3.5 trillion was accounted for by non-mortgage asset-backed securities which included securitised home equity loans, auto loans, consumer loans, credit card debt, student loans and other sorts of non-mortgage loans.[42]

42. Despite this strong growth in recent years, the total size of the market of asset-backed securities and sub–prime residential mortgage-backed securities is small when compared with other securities markets, such as those for corporate equities and corporate debt. According to the Bank of England, the biggest securities markets are for corporate equities, which had an estimated global value of $50.6 trillion at the end of 2006, whilst corporate debt markets had an estimated value of $17.1 trillion at the end of 2006.

39 Q 1174

40 *Financial Stability Report*, Bank of England, October 2007, p 6

41 The size of this market may have changed as the value of many asset-backed securities has fallen since December 2006, particularly those securities related to US sub–prime mortgages.

42 Bank of England, *Financial Stability Report*, October 2007, p 20

The shift from an 'originate and hold' to an 'originate and distribute' banking model

43. The growth of markets for asset-backed securities and structured finance products marks a fundamental shift in the business model adopted by banks. Traditionally, banks have operated under an 'originate and hold' banking model, so–called because banks held loans to maturity. Many banks have now moved toward an 'originate and distribute' model where loans are made but then sold to investors. Professor Buiter explained that under the traditional 'originate and hold' model:

> banks borrowed short and liquid and lent long and illiquid. On the liability side of the banks' balance sheet, deposits withdrawable on demand and subject to a sequential service (first come, first served) constraint figured prominently. On the asset side, loans, secured or unsecured to businesses and households were the major entry. These loans were typically held to maturity by the banks (the 'originate and hold' model). Banks therefore transformed maturity and created liquidity. [43]

44. Professor Buiter told us that the move away from the 'originate and hold' banking business model first developed in the United States in the 1970s as Fannie Mae (Federal National Mortgage Association), Ginnie Mae (Government National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation) began the process of securitisation of residential mortgages, operating increasingly under an 'originate and distribute' model.[44] The International Monetary Fund noted in December 2007 that this market structure, with government-sponsored enterprises at its centre, was a 'tremendous success' and attracted competition from other major financial institutions, with the major Wall Street firms launching an aggressive move into the issuance of mortgage-backed securities.[45]

45. Professor Buiter explained how securitisation has evolved, and become more complex over time, by contrasting 'simple' securitisation—which involved the pooling of reasonably homogenous assets with a given (and generally lower) risk profile—with second-tier and higher-tier securitisations:

> However, second–tier and higher–tier–securitisation then took place, with tranches of securitised mortgages being pooled with securitised credit card receivables, car loan receivables etc. and tranched securities being issued against this new, heterogeneous pool of securitised assets. Myriad credit enhancements were added. [46]

46. Recent years have seen an increasing number of banks in the USA moving away from the 'originate and hold' model and placing an increasing emphasis on an 'originate and distribute' model. As a result, whereas in 2003, government sponsored enterprises were the source of 76% of the mortgage–backed and asset–backed issuances in the USA with

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[43] Ev 311

[44] *Ibid.*

[45] Randall Dodd, Sub–prime: tentacles of a crisis, *Finance and Development*, Volume 44, Number 4, December 2007

[46] Ev 312

'private label' issues accounting for the remaining 24%, by 2006 private sector banks were the source for almost 60% of mortgage-backed issuances in the USA.[47]

47. Under the 'originate and distribute' model, loans that banks make are then sold to an off-balance sheet special purpose vehicle (SPV). In theory at least, the insolvency of any such SPV should have no impact on the bank which originated the loans: the risk is said to have been distributed. Mr Corrigan told us that the use of special purpose vehicles was common amongst financial institutions in that "most financial institutions have at least some form of off-balance sheet activities, typically in the form of special purpose vehicle." [48] The special purpose vehicle is simply a corporation registered in what is usually an offshore financial centre.[49] The special purpose vehicle parcels together these loans into securities backed by the cash flows from those loans (asset-backed securities) with these securities sold to investors such as pension funds, insurance companies, mutual funds, hedge funds and other banks. This process is known as 'disintermediation'. Securitisation allows the banking originator to earn fee income from their underwriting activities without leaving themselves exposed to credit market or liquidity risk because they sell the loans they make.[50]

48. Securities have also been sold to off balance sheet investment vehicles, many of which have been established or sponsored by the banks themselves. These investment vehicles include conduits and structured investment vehicles. The essential difference between a conduit and a structured investment vehicle is that conduits are established and owned by banks whilst structured investment vehicles are not owned directly by banks, although banks have close relations with them as sponsors. Professor Buiter expanded on the difference between the two, explaining that conduits were structured investment vehicles "closely tied to a particular bank" while structured investment vehicles were special purpose vehicles investing in long-term, often illiquid complex securitised financial instruments.[51]

49. Professor Buiter told us that structured investment vehicles "fund themselves in the short–term wholesale markets, including the asset-backed commercial paper markets".[52] Asset-backed commercial paper is commercial paper collateralised by loans, leases, receivables, or asset-backed securities. Conduits are also largely funded through asset–backed commercial paper. The proceeds from these short-term instruments, such as asset–backed commercial paper, are then used by investment vehicles to fund the purchase of assets of longer duration, such as asset-backed securities and collateralised debt obligations. This maturity mismatch, where the assets held by conduits and structured investment vehicles have a long maturity whereas asset-backed commercial paper is of short maturity, can leave these vehicles vulnerable to disruption in investor demand for asset-backed

[47] *Ibid.*

[48] Q 1234

[49] Randall Dodd, Sub–prime: tentacles of a crisis, *Finance and Development*, Volume 44, Number 4, December 2007

[50] *Ibid.*

[51] Ev 314

[52] *Ibid.*

commercial paper. To mitigate this 'rollover' risk, conduits and structured investment vehicles typically hold committed liquidity lines provided by commercial banks.[53]

50. One of the key drivers behind the establishment of conduits and structured investment vehicles was regulatory arbitrage, as was explained to us by Professor Buiter:

> Most of the off-balance sheet vehicles … I am familiar with are motivated by regulatory arbitrage, that is, by the desire to avoid the regulatory requirements imposed on banks and other deposit-taking institutions. These include minimal capital requirements, liquidity requirements, other constraints on permissible liabilities and assets, reporting requirements and governance requirements. Others are created for tax efficiency (i.e. tax avoidance) reasons.[54]

51. Professor Buiter explained the attraction of the 'originate and distribute' model to private banks as they took advantage of securitisation techniques, using them to:

> liquefy their illiquid loans. The resulting 'originate and distribute' model had major attractions for the banks and also permitted a potential improvement in the efficiency of the economy–wide mechanisms for intermediation and risk sharing. It made marketable the non–marketable; it made liquid the illiquid. There was greater scope for trading risk, for diversification and for hedging risk [55]

52. The Governor of the Bank of England cited some of the advantages of the 'originate and distribute model' for banks, telling us that it "has been a very healthy development … and had enabled a number of smaller financial institutions to obtain funding from others by borrowing against the securitised form of mortgages.[56] Mr Sants added that securitisation programmes which created long-term secure funding are a very good source of funds.[57] The 'originate and distribute' model has also helped drive strong profit growth in the banking sector. The Bank of England stated in its October 2007 Financial Stability Report that profit growth in recent years in the banking sector had been driven by the 'originate and distribute' business model, with UK banks' and Large Complex Financial Institutions' enjoying returns on equity often well in excess of 20%.[58]

Credit rating agencies and the tranching process

The growing role of the agencies

53. The credit rating agencies play a key role rating structured finance products, a role which is particularly important given the complexity of such products. The ratings agencies have long played a role in rating traditional debt instruments, such as the financial

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[53] Bank of England, *Financial Stability Report*, October 2007, Box 3, p 33

[54] Ev 314

[55] Ev 311

[56] Q 1688

[57] Q 249

[58] Bank of England , *Financial Stability Report*, October 2007, p 41

obligations of corporations, banks, and governmental entities. The credit rating agencies subsequently moved into the structured finance market, providing ratings for 'tranched' securitised or structured finance products. This was natural territory for credit rating agencies to occupy given their experience in rating traditional debt instruments. A small number of internationally recognised rating agencies, including Standard & Poor's, Moody's and Fitch, account for most of the rating of complex financial instruments, including asset-backed securities.[59]

54. Credit ratings are, broadly speaking, used by investors as indications of the likelihood of receiving their money back in accordance with the terms on which they invested. Moody's told us that their credit ratings are forward-looking opinions that address just one characteristic of fixed income securities, the likelihood that debt will be repaid in accordance with the terms of the security. Credit ratings reflect an assessment of both the probability that a debt instrument will default and the amount of loss the debt-holder will incur in the event of default.[60]

Credit rating scores

55. We asked the credit ratings agencies to explain their scoring system. Standard & Poor's explained that their "ratings range from the highest category of AAA, through AA, A, BBB (which is the lowest of what are referred to as to the 'investment grade' ratings) to D (indicating a situation where an obligation is in default)". They went on to tell us that ratings for AA to CCC might be modified by the addition of a plus (+) or minus (–) to show relative standing within the major rating categories. Standard & Poor's said that their highest rating of AAA denoted that, in their opinion, an issuer or security has an extremely strong capacity to meet its financial commitments.[61]

56. Moody's had a slightly different scoring system and explained that their "ratings are expressed according to a simple system of letters and numbers, on a scale that has 21 categories ranging from Aaa to C". They told us that their "lowest expected credit loss is at the Aaa level, with a higher expected loss rate at the Aa level, an even higher expected loss rate at the A level, and so on down through the rating scale".[62]

The importance of a 'good' credit rating

57. One of the key reasons issuers of structured instruments wanted them to be rated according to scales that were identical to those for bonds was so that investors, some of whom were bound by the ratings–based constraints defined by their investment mandates, would be able and willing to purchase the new instruments. Mr David Pitt–Watson, Chairman, Equity Ownership Services at Hermes, explained that credit ratings were often used to give mandates with investors sometimes only allowed to invest in bonds that have a

[59] Ev 312

[60] Ev 280

[61] Ev 273

[62] Ev 280

certain credit rating. As a result "to get a good credit rating is worth so much to the issuer because it means the interest rate is lower and the amount of money it raises can be a lot higher".[63] The Association of British Insurers concurred, telling us that "institutional investors frequently receive mandates from clients limiting them to investments above a certain credit rating.[64] Mr Frederic Drevon, Senior Managing Director at Moody's, told us:

> in the specific context of securitisation, arrangers who create these transactions have a goal to achieve a higher rating, typically a triple–A rating, so they will structure a transaction in a way that achieves the highest rating possible.[65]

Tranching

58. To achieve a triple A rating, especially from lower rated sub–prime mortgages, often requires a degree of financial engineering. This financial engineering is achieved through various credit enhancements (described below) which are designed to ensure that triple A or other investment grade tranches—often referred to as 'senior' tranches—are relatively secure against credit risk, thus enabling the creation of at least one class of securities whose rating is higher than the average rating of the underlying collateral asset, with the end result that AAA security tranches are often backed in part by BBB securities. [66]

59. Credit enhancement is achieved through tranching, which refers to the issuance of several classes of securities against a pool of assets, each with distinct risk-return characteristics.[67] The creation of distinct classes of risk allows investors to purchase tranches that match their appetite for risk, allowing, for example, more risk-averse investors to purchase AAA tranches or 'senior' tranches which offer lower yields, but greater protection against default.

60. In a common three–tranche, the least risky, or 'senior', tranche has the first claim on payments from the pooled mortgages. The 'senior' tranche has the highest credit rating, often triple–A investment grade, but receives a lower rate of interest than the other tranches. After the senior claims are paid, the middle or mezzanine tranche receives its payments. Mezzanine represents greater risk and usually receives below-investment grade credit ratings and a higher rate of return. The lowest, or equity, tranche receives payments only if the senior and mezzanine tranches are paid in full. The equity/first-loss tranche absorbs initial losses. Equity tranches are therefore the most risky tranche and consequently often unrated, but as a consequence offer the highest rate of return. This process, whereby losses are applied to more 'junior' tranches before they are applied to more 'senior' tranches, is known as subordination and is one, albeit important, form of credit enhancement. Ian Bell, Managing Director and Head of European Structured Finance at Standard & Poor's explained to us "that in order to have a triple A you have to

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[63] Q 1391

[64] Ev 268

[65] Q 949

[66] IMF, *Global Financial Stability Report*, October 2007, Chapter 1; Bank for International Settlements, *The role of rating in structured finance: issues and implications,* , January 2005

[67] Bank for International Settlements, *The role of ratings in structured finance: issues and implications,* January 2005, p 55

have a credit cushion [whereby more 'junior' tranches take initial losses] so the pool of mortgages can absorb a certain amount of losses before there are any losses at the triple A level".[68] Mr Bell went on to tell us that the credit cushions in the case of sub–prime were very substantial so as to protect more senior or triple A tranches against losses.[69]

61. Other commonly used credit enhancements designed to protect 'senior' tranche holders against losses include:

- Monoline insurance: Third–party insurance or other financial guarantees may be provided to protect investors from losses.

- Excess servicing: A pre-set amount of interest is explicitly set aside from the servicing of the collateral each month to be used to make up any shortfalls in cash flows for senior tranches.

- Residual tranching: Additional cash flows above and beyond excess servicing are set aside to cover losses as needed.[70]

62. The 'search for yield' phenomenon and strong investor interest has led to the rapid growth (or explosion) of structured finance instruments with triple A or 'investment grade' ratings. Representatives of the credit ratings agencies told us that there were perhaps 30 or 40 triple A rated sovereign credits, whilst globally only a 'handful' of banks and corporates enjoyed a triple A rating. The agencies acknowledged that, by way of contrast, there were thousands of structured finance products with a triple A rating.[71]

63. **The relatively recent innovation of tranching, whereby a pool of assets is converted into low-risk, medium-risk and higher-risk securities, has led to a mushrooming of triple-A securities available for investment. Rating these securities has been an increasing source of income for the credit rating agencies. Tranching has proven successful at tailoring investment opportunities to meet the risk-appetites of investors, particularly those bound by strict investment mandates, specifying AAA investments. This market innovation has, however, led to greater complexity.**

Who purchased asset-backed security tranches?

64. We asked witnesses from the investor community whether they or their member companies had invested in asset–backed securities. All said that they had invested in asset-backed securities, but stressed that their involvement in these markets was limited. The National Association of Pension Funds said the industry's exposure to such products amounted to 1–2% of assets.[72] Peter Montagnon, Director of Investment Affairs the

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[68] Q 992

[69] *Ibid.*

[70] IMF, *Global Financial Stability Report*, April 2007, Chapter 1, Box 1.1, p 8

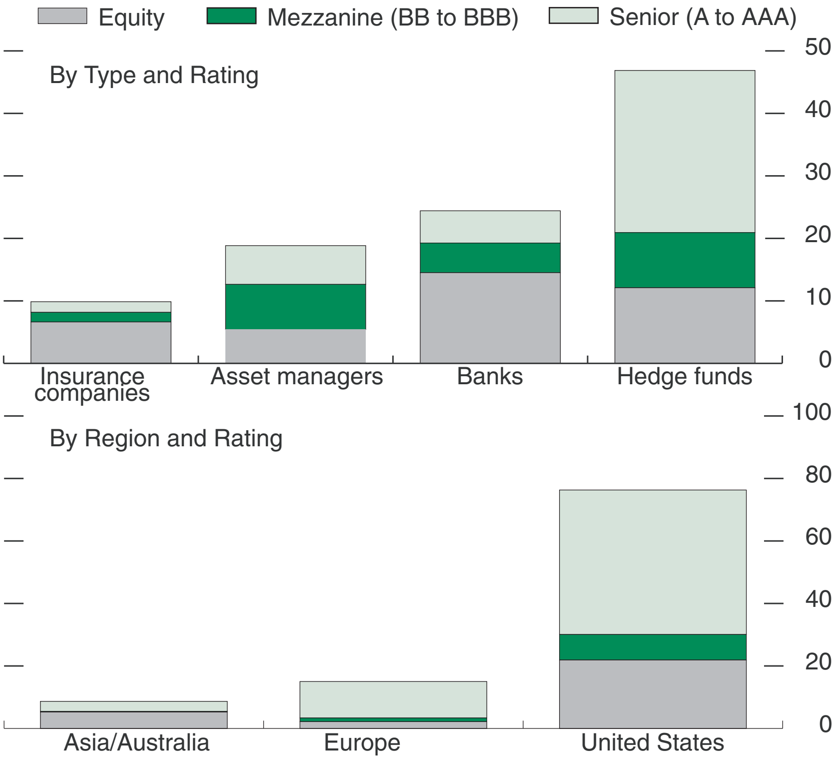
[71] Qq 1045–1052

[72] Ev 332

Association of British Insurers, estimated that asset-backed securities amounted to around 0.5% of ABI member companies' portfolio.[73]

65. Chart 1 below, from the 2007 IMF's Global Financial Stability Report, show, that a wide range of financial institutions, including insurance companies, asset managers, banks and hedge funds, have purchased asset-backed security CDOs, with hedge funds the largest category of investor in such products. It also shows how different types of investors purchased different tranches of asset-backed security CDOs, with hedge funds and banks the largest purchasers of equity tranches and hedge funds also large purchasers of mezzanine tranches. Chart one also shows that the US institutions were the largest buyers of asset-backed security CDOs, but that European, Asian and Australian investors were also purchasers of these products.

Chart 1: Buyers of Collateralised Debt Obligations backed by Asset Backed Securities



Source: IMF, Global Financial Stability Report, October 2007, p 15

The sub–prime mortgage market in the USA

Overview

66. The initial trigger for the financial market turbulence since August 2007 was growing problems in the sub–prime mortgage market in the United States. The sub–prime mortgage market originated in the USA, and the US market is much larger relative to the economy than is the equivalent UK market. Mr Sants told us that the sub–prime market

[73] Q 1381

was much larger in the USA than in the UK, with around 25% of the US housing market characterised as sub–prime compared to just 8% in the UK.[74]

67. Sub–prime mortgages are loans made to borrowers who are perceived to have high credit risk, often because they lack a strong credit history or have other characteristics that are associated with high probabilities of default.[75] Sub–prime status is calculated on the basis of credit scores. The leading credit scoring agency is the Fair Isaac Corporation (FICO). Its credit scores are on a scale of 300 to 850.[76] A score of 620 or below usually denotes sub-prime status.

The growth of the sub–prime mortgage market in the USA

68. A particular feature of the market in asset–backed securities has been the recent growth in sub–prime lending and, in particular, the growth of the market for US sub–prime residential mortgage-backed securities. Ben Bernanke, Chairman of the Federal Reserve Board, in a speech in May 2007 explained that "having emerged more than two decades ago, sub–prime mortgage lending began to expand in earnest in the mid–1990s". He went on to explain that the expansion of sub–prime lending was spurred in large part by:

> innovations that reduced the costs for lenders of assessing and pricing risks. In particular, technological advances facilitated credit scoring by making it easier for lenders to collect and disseminate information on the creditworthiness of prospective borrowers. In addition, lenders developed new techniques for using this information to determine underwriting standards, set interest rates, and manage their risks.[77]

Mr Bernanke outlined how the growth of securitisation gave a further boost to sub–prime mortgage lending in the USA, explaining that "the ongoing growth and development of the secondary mortgage market has reinforced the effect of these innovations" and that:

> whereas once most lenders held mortgages on their books until the loans were repaid, regulatory changes and other developments have permitted lenders to more easily sell mortgages to financial intermediaries, who in turn pool mortgages and sell the cash flows as structured securities. These securities typically offer various risk profiles and durations to meet the investment strategies of a wide range of investors. The growth of the secondary market has thus given mortgage lenders greater access to the capital markets, lowered transaction costs, and spread risk more broadly, thereby increasing the supply of mortgage credit to all types of households.[78]

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74 Q 245

75 Speech by Chairman Ben S. Bernanke, at the Federal Reserve Bank of Chicago's 43rd Annual Conference on Bank Structure and competition, Chicago, Illinois, 17 May 2007

76 FICO website

77 Speech by Chairman Ben S. Bernanke, at the Federal Reserve Bank of Chicago's 43rd Annual Conference on Bank Structure and competition, Chicago, Illinois, 17 May 2007

78 *Ibid.*

69. Automated underwriting and securitisation were therefore key developments in reducing the cost of sub–prime mortgage lending and facilitated a relaxation of credit rationing for borrowers previously considered too risky by traditional lenders.[79] Mr Corrigan explained to us that sub–prime lending took off in the USA around 2003 and 2004 and that, whilst "there were elements of it before that" it emerged as a major business during this time frame.[80] Mr Palmer told us that "the huge growth of sub–prime lending in the USA is a relatively recent phenomenon" and that "the huge growth came about in 2005 and 2006".[81] Mr Palmer explained to us that this growth in the sub–prime market took place in the context of the 'search for yield' phenomenon discussed earlier in the chapter.[82]

70. The development of the sub–prime market was welcomed and even heralded by some as the "democratisation of capital",[83] and, as Mr Bernanke said in his May 2007 speech, made "home ownership possible for households that in the past might not have qualified for a mortgage … and has thereby contributed to the rise in the home ownership rate since the 1990s". In 1995, 65 percent of households owned their homes but this had increased to almost 70% by 2006. This increase in home ownership, according to Mr Bernanke, "has been broadly based, but minority households and households in lower-income census tracts have recorded some of the largest gains in percentage term".[84] Mr Sants expressed similar sentiments when he appeared before us, telling us that there was a genuine social purpose in the sub–prime market, which is to deliver affordable housing,[85] whilst Mr Corrigan argued that "the development of the sub–prime mortgage market was a noble idea, because what it sought to do was provide access to home ownership on the basis of individuals and families who by historic standards never had any realistic hope of being able to own their own homes".[86]

The financial stability and efficiency implications of the 'originate and distribute' business model

71. Mr Alexandre Lamfalussy, former General Director of the Bank for International Settlements, in a speech in Brussels on 23 January 2008, explained that:

> until this crisis most market participants and a number of weighty officials argued that the ['originate and distribute'] model (just as securitisation) increased the efficiency of our system and that it had a stabilising effect on our global system, by

[79] IMF, *Money for Nothing and Checks for Free: Recent developments in US sub–prime mortgage markets*, IMF Working paper

[80] Q 1259

[81] Qq 1261, 1262

[82] Q 1153

[83] *Securitisation: when it goes wrong*, *The Economist*, 20 September 2007

[84] Speech by Chairman Ben S. Bernanke, at the Federal Reserve Bank of Chicago's 43rd Annual Conference on Bank Structure and competition, Chicago, Illinois, 17 May 2007

[85] Q 245

[86] Q 1240

> diminishing the concentration of risk on the banking sector and distributing those risks more widely. [87]

72. Sir Callum McCarthy, Chairman of the FSA, stressed the risk argument to us, stating that the "originate and distribute" model "distributes risk much more widely, and that in itself is attractive because it stops risk being concentrated in highly geared banks.[88] In June 2007, Nigel Jenkinson, Executive Director, Financial stability at the Bank of England, summed up the advantages resulting from the evolution of financial markets and the growth of securitisation, described in this chapter, as follows:

> Financial innovation has delivered considerable benefits. New products have improved the ability to hedge and share risks and to tailor financial products more precisely to user demand. That has enabled financial intermediaries and users of financial services to manage financial risks more effectively, and has lowered the costs of financial intermediation. And innovation and capital market integration have facilitated the wider dispersal of risks, which may have increased the resilience of the financial system to weather small to medium-sized shocks. [89]

Mr Jenkinson in the same speech went on to discuss some of the disadvantages and vulnerabilities of these changes:

> Dependence on capital markets and on sustained market liquidity has increased, as banks and other intermediaries place greater reliance on their ability to 'originate and distribute' loans and other financial products, and to manage their risk positions dynamically as economic and financial conditions alter … And the greater integration of capital markets means that if a major problem does arise it is more likely to spread quickly across borders. So … the flip side to increased resilience of the financial system to small and medium-sized shocks may be a greater vulnerability to less frequent but potentially larger financial crises.[90]

[87] *Looking Beyond the Current Credit Crisis*, Speech by Alexandre Lamfalussy, at the meeting of the Economic and Monetary Affairs Committee of the European parliament with national parliaments, Brussels, 23 January 2008

[88] Q 1465

[89] Promoting Financial System Resilience in Modern Global Capital Markets – Some issues, Speech by Nigel Jenkinson, Executive Director, Financial Markets, Bank of England, at the conference 'Law and economics of Systemic Risk in Finance'. University of St Gallen, 29 June 2007, p 2

[90] *Ibid.*

3 Events leading to the closure of the credit markets

Growth of problems in the sub–prime mortgage market

73. Problems in the US sub–prime mortgage market emerged in 2005 with arrears and defaults rising through 2006. There had been warnings through the course of 2006 that conditions in the sub–prime market would continue to deteriorate and would get worse in 2007. For example, the Centre for Responsible Lending, a research and policy organisation, specialising in home ownership issues and based in Washington DC, published a report in December 2006 stating:

> As this year [2006] ends, 2.2 million household in the sub–prime market either have lost their homes to foreclosure or hold sub–prime mortgages that will fail over the next several years. These foreclosures will cost homeowners as much as $164 billion, primarily in lost home equity. [91]

74. The Centre for Responsible Lending's December 2006 report predicted that "one out of five sub–prime mortgages originated during the past two years will end in foreclosure", double the rate for sub–prime loans originated in 2002.[92] Professor Buiter told us that arrears on US sub–prime mortgages had already been rising for some time: during the second half of 2005 and the delinquency rate [93] on US mortgages had risen from approximately 10% during 2006 and reached 15% by early 2007.[94] Mr Bernanke, in May 2007 confirmed that the situation was continuing to deteriorate, stating that whilst "mortgage credit quality has been very solid in recent years … that statement is no longer true of sub–prime mortgages with adjustable interest rates, which currently account for about two-thirds of sub–prime first-lien mortgages". Mr Bernanke went on to explain that:

> For these mortgages, the rate of serious delinquencies—corresponding to mortgages in foreclosure or with payments ninety days or more overdue—rose sharply during 2006 and recently stood at about 11% about double the recent low seen in mid-2005 … In the fourth quarter of 2006, about 310,000 foreclosure proceedings were initiated, whereas for the preceding two years the quarterly average was roughly 230,000. Subprime mortgages accounted for more than half of the foreclosures started in the fourth quarter.[95]

[91] *Losing Ground: Foreclosures in the sub–prime market and their cost to homeowners*, Centre for Responsible Lending, December 2006, p 3

[92] *Ibid.*

[93] The number of loans with delinquent payments divided by the number of loans in a portfolio.

[94] Ev 320

[95] Speech by Chairman Mr Ben S Bernanke, Chairman of the Board of Governors of the US Federal Reserve System, at the Federal Reserve Bank of Chicago's 43rd Annual Conference on Bank Structure and Competition, Chicago, 17 May 2007

75. Problems in the sub–prime market continued to worsen through the second half of 2007 with Mr Bernanke noting that, by August 2007, “the rate of serious delinquencies has risen notably for sub–prime mortgages with adjustable rates, reaching nearly 16 percent in August [2007], roughly triple the recent low in mid–2005”. [96] The IMF has noted that “the speed with which delinquency and default rates have risen for the 2006 vintage of loans has been striking” with high volumes of ‘early payment defaults’, in which the borrower misses one or two of the first three monthly payments.[97]

76. The sharp rise in delinquencies and foreclosures through 2006 and 2007 on sub–prime mortgages in the USA and on adjustable–rate mortgages in particular has multiple inter-connected causes. These include the interplay between the growing use of adjustable rate mortgages (comparatively novel in the USA), interest rate rises and house price falls, as well as looser lending standards and fraud.

77. Adjustable rate mortgages, as outlined in the previous section, accounted for a large number of defaults on sub–prime mortgages. Adjustable rate mortgages often come with an initial fixed, but below market, or ‘teaser’ (and sometimes interest-only) rate. Their use increased from 2005 and 2006 when heightened competition between sub–prime originators to maintain volumes and increase market share led to product innovations, such as ‘affordable lending’ products, often incorporating low initial ‘teaser’ rates that are reset after two or so years.[98] “Teaser rates”, whilst intended to make mortgages more affordable also, however, made borrowers vulnerable to interest rate resets which the IMF has labelled ‘reset shock’.[99] Professor Buiter explained that “because many of the mortgages granted in 2005 and 2006 had up-front ‘teaser rates’, which during 2007 and 2008 would reset at much higher levels, there was only one direction delinquencies were going to go: up”.[100]

78. As long as house prices were rising, rate ‘reset shocks’ that occurred when the ‘teaser’ rate expired could be averted by re-financing the mortgage into another adjustable rate mortgage.[101] However, Mr Bernanke explained that house prices in the United States, “after rising at an annual rate of nearly 9% from 2000 through 2005, then decelerated, even falling in some markets”, which Mr Bernanke went on to say “occurred at the same time as interest rates on both fixed and adjustable rate mortgage loans moved upward”.[102] Mr Corrigan stressed to us that these absolute falls in house prices were unanticipated, before going on to say no-one could have anticipated that “in key segments of the residential mortgage markets in the United States house prices, which have not declined in absolute

96 *The recent financial turmoil and its economic and policy consequences*, Speech by Chairman Ben S. Bernanke, at the Economic Club of New York, New York, 15 October 2007, p 2

97 IMF, *Lessons from sub–prime turbulence*, IMF survey magazine: IMF research, August 2007, p 3

98 Bank of England, *Financial Stability Report*, April 2007, p 22

99 IMF, *Money for nothing and checks for free: Recent developments in US sub–prime mortgage markets*, IMF Working Paper, by John Kiff and Paul Mills, July 2007

100 Ev 320

101 IMF, *Lessons from sub–prime turbulence*, by John Kiff and Paul Mills, IMF survey magazine: IMF research, August 2007

102 Speech by Mr Ben S Bernanke, Chairman of the Board of Governors of the US Federal Reserve System, at the Federal Reserve Bank of Chicago’s 43rd Annual Conference on Bank Structure and Competition, Chicago, 17 May 2007

terms in over 30 years, would do so by 5% or 6%”.[103] Mr Bernanke has explained that the consequence of these falls in house prices combined with interest rate rises was that some sub–prime borrowers with adjustable rate mortgages who might have counted on refinancing before their payments rose, might not have had enough home equity to qualify for a new loan given the sluggishness in house prices.[104] The end result according to the IMF was that “slowing house price appreciation and rising interest rates left many stretched borrowers with no choice but to default”.[105]

79. The Governor of the Bank of England stressed the unsuitability of some lending decisions in the US sub–prime market, telling us that there was:

> some pretty extraordinary lending in the sub–prime mortgage market to people who could just about afford to buy a home that they never thought they would be able to afford and they were encouraged to think that they could afford it, but only when the policy rate set by the Fed was 1% and once interest rates got back to a more normal 5% they clearly could not afford it.[106]

80. Looser underwriting standards is another contributory factor to growing problems in the sub–prime housing market. An IMF working paper dates looser underwriting standards in the sub–prime mortgage market to 2005–06.[107] Mr Bernanke has also stressed the role of loosened underwriting standards as an important contributory factor to the problems in the sub–prime mortgage market, linking lower credit risk assessment standards to the continuing search for yield by investors:

> The practices of some mortgage originators has also contributed to the problems in the sub–prime sector. As the underlying pace of mortgage originations began to slow, but with investor demand for securities with high yields still strong, some lenders evidently loosened underwriting standards. So-called risk layering—combining weaker borrowing credit histories with other risk factors, such as incomplete income documentation or very cumulative loan-to-value ratios—became more common.[108]

81. Looser underwriting standards were also emphasised by Mr Corrigan: “there is no question as far as I am concerned that at origination point the standards of diligence, credit-checking, marketing and promotion—some of these mortgages got out of hand”. [109]

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[103] Q 1273

[104] Speech by Mr Ben S Bernanke, Chairman of the Board of Governors of the US Federal Reserve System, at the Federal Reserve Bank of Chicago’s 43rd Annual Conference on Bank Structure and Competition, Chicago, 17 May 2007

[105] IMF, *Lessons from sub–prime turbulence*, IMF survey magazine: IMF research, August 2007

[106] Q 1678

[107] IMF, *Money for nothing and checks for free: Recent developments in US sub–prime mortgage markets*, IMF Working Paper, by John Kiff and Paul Mills, July 2007, p 7

[108] Speech by Mr Ben S Bernanke, Chairman of the Board of Governors of the US Federal Reserve System, at the Federal Reserve Bank of Chicago’s 43rd Annual Conference on Bank Structure and Competition, Chicago, 17 May 2007

[109] Q 1240

82. **Looser underwriting standards have played an important role in the problems affecting the sub–prime mortgage market in the USA. We are concerned that these looser standards are linked to the decisive loosening of the link between creditor and debtor under the 'originate and distribute' banking model. There are therefore important lessons to be learnt that go far beyond the sub–prime housing market in the USA and which apply to other markets. We discuss the issue of a loosening of underwriting standards under the 'originate and distribute' model further later in this Report.**

83. A final factor which contributed to rising sub–prime defaults were regional economic problems and rising unemployment in some parts of the USA. This helped explain why some states in the Midwest, such as Michigan and Ohio, hit hardest by job cuts in the car industry, are among the states with the highest rate of new foreclosures.[110]

The spillover into the credit markets

84. The Governor of the Bank of England told us, in his letter of 12 September 2007, that "rising default rates on sub–prime mortgages in the United States were the trigger for the recent financial market turmoil".[111] Under the traditional 'originate and hold' banking model, growing defaults on sub–prime mortgages would have impacted largely on the banks and other mortgage lenders who made and then held the loans until maturity. However, under the 'originate and distribute' model, described in chapter 2, many sub–prime loans were parcelled into asset–backed securities and other structured products, such as collateralised debt obligations, and sold on to investors, with the end result that risks and exposure to the sub–prime market in the USA were spread far more widely through the international financial system.

85. Beginning in early 2007, the problems in the sub–prime market discussed above began to feed through into the credit markets. For example, US sub–prime spreads in the credit markets rose in early 2007,[112] reflecting market expectations of increased sub–prime mortgage defaults. The IMF also reported that market participants began to increase their expectations for non-prime mortgage-related losses around this time and that this was "reflected in a pronounced widening in cash and credit default swap spreads on asset-backed securities and collateralised debt obligations backed by recently originated sub–prime mortgages, beginning in early 2007".[113]

86. Another early sign that problems in the US sub–prime housing market were impacting more widely upon financial institutions was HSBC's announcement in February 2007 of large sub–prime-related credit losses of approximately £10.5 billion.[114] Despite this early

[110] Speech by Governor Randall S. Kroszner, at the Consumer Bankers Association 2007 Fair Lending Conference, Washington DC, 5 November 2007

[111] Ev 214

[112] Bank of England, *Financial Stability Report*, October 2007, p 7

[113] IMF, *Global Financial Stability Report*, October 2007, p 9

[114] HSCBC trading update – US mortgage update, 7 February 2007

announcement of losses by HSBC, Mr Corrigan believed that observers were slow in recognising the potential scale of the problems in the US housing market and its potential contagion effects:

> It was probably the losses experienced by the Bear Stearns hedge funds in the early summer that brought the problem into sharper focus and served as the wake up call as to the serious nature of the problem and its potential to unleash damaging contagion risk forces. [115]

87. As discussed previously, default levels on US sub–prime mortgages continued to rise through 2007. As a result, credit spreads on US sub–prime securities continued to increase further through 2007, rising sharply in July 2007, indicating even higher perceived default risk on underlying assets. However, through the course of 2007, credit spreads began to rise on other non sub–prime asset-backed securities. Professor Buiter told us that, as 2007 went on, "the widening of credit risk spreads was not confined to sub–prime related instruments and institutions".[116] Indeed the Bank of England noted that "from July 2007 spreads on asset-backed securities rose across the globe".[117] The British Bankers Association dated this 'contagion' effect to June and July 2007, stating that "the impact was no longer confined to the US sub–prime market, but affected the market for all mortgage backed securities globally and banks who typically securitised their mortgage book found that they either could not do this at all or could only do so on much worse terms than before".[118] Paul Tucker, Executive Director, Markets at the Bank of England, explained to us that "all the asset-backed securities market seized up on the basis of problems in a relatively localised area—sub–prime".[119] Mr Tucker went on to explain that one of the underlying problems fuelling the 'contagion' effect was investors not distinguishing "between one type of security that has got into real difficulties and other types of security that are maybe okay".[120] This failure to distinguish between different securities may help explain the 'contagion' effect which led to widening spreads through the course of 2007 in all markets for asset–backed securities and not just those exposed to sub–prime mortgages.

The role of the credit ratings agencies

88. The OECD explained that, in June and July 2007, in response to the continuing deterioration in the sub–prime housing market, "hundreds of securities backed by sub–prime loans were downgraded or placed on review for downgrade with most of the securities downgraded by three to four notches".[121] This meant that the ratings for securities backed by sub–prime loans had been lowered in the ratings scale and by three to

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[115] Ev 333

[116] Ev 322

[117] Bank of England, *Financial Stability Report*, October 2007, p 7

[118] British Bankers Association submission to the Tripartite authorities: recommendations regarding financial stability, regulatory coordination and issues in the international mortgage backed securities and credit markets, British Bankers Association, p 21

[119] Q 10

[120] Q 92

[121] OECD, *Financial Markets Highlights*, November 2007

four levels, for example from AAA to A+ indicating an assessment by the agencies of greatly increased default risk.[122] For example, on 10 July 2007, Standard & Poor's said it was considering cutting ratings on $12 billion of sub–prime mortgage-backed securities which it finally did on 19 July.[123] These large-scale ratings downgrades during June and July 2007 were described by the Organisation for Economic Development (OECD) as "unexpected".[124] However, these ratings downgrades did not end the uncertainty about credit quality and the OECD reports that uncertainty about credit quality continued after the June and July 2007 downgrades as the "ratings agencies admitted their lack of appropriate models to assess the effects of the turmoil in the housing market on ratings of the remaining securities".[125]

89. Over the same period the ratings agencies began the process of reviewing their methods. For example, Standard & Poor's told us that, in response to deteriorating sub–prime performance and increasingly poor data performance, they took steps to modify their models and ratings in July (as well as October) 2007. Standard & Poor's said that these steps "included increasing the severity of the surveillance assumptions we use to evaluate the ongoing creditworthiness for residential mortgage-backed securities transactions and downgrading those that did not meet these stress test scenarios within given time frames".[126] The consequence of these ratings downgrades and doubts over the methods used by the ratings agencies was drawn out by Bank of England, in its October 2007 Financial Stability Report: "ratings downgrades and changes in agencies' methodologies further undermined the confidence of some investors, prompting further selling of these assets."[127]

90. **We note with concern that the credit rating agencies appear to have been slow to downgrade their ratings for securities backed by sub–prime mortgages. Additionally, the ratings downgrades they made over the summer of 2007 were large–scale in nature and appear to have been 'unexpected' by many market participants. Large, belated and unexpected shocks can only serve to exacerbate the problems in credit markets. The very fact that the credit rating agencies began reviewing their methods during this period is an implicit admission that they got it wrong and that they did not have the appropriate models to rate such securities during a time of stress.**

Warnings from public authorities about pricing of risk and potential impaired market liquidity

91. During the first half of 2007, a number of public authorities, including the Bank of England and the FSA, as well as international organisations such as the International

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122 See paragraphs 55–56.

123 British Bankers' Association submission to the Tripartite authorities: recommendations regarding financial stability, regulatory coordination and issues in the international mortgage backed securities and credit markets, British Bankers' Association, p 21

124 OECD, *Financial Market Highlights*, November 2007, p 21

125 *Ibid.*

126 Ev 274

127 Bank of England, *Financial Stability Report*, October 2007, p 7

Monetary Fund and the Bank for International Settlements, had raised questions about the under-pricing of risk in credit markets, characterised by very low risk spreads, with declining differentials between risky assets and safe assets, as well as risks of impaired market liquidity. For example, the FSA in its January 2007 Financial Risk Outlook warned that:

> this period of economic and market stability does not mean that the financial system is necessarily in a position to withstand the impact of a significant event. Financial markets have become increasingly complex since the last financial stability crisis, which implies that transmission mechanisms for shocks have also become more complicated and possibly more rapid. Market liquidity remains abundant (irrespective of how it is measured), but it is still important for market participants to consider how they would operate in an environment where liquidity is restricted.[128]

92. The Bank of England's April 2007 Financial Stability Report similarly highlighted potential weaknesses, including impaired market liquidity:

> Financial institutions can become more dependent on sustained market liquidity both to allow them to distribute the risks they originate or securitise and to allow them to adjust their portfolio and hedges in the face of movements in market prices. If it becomes impossible or expensive to find counterparties, financial institutions could be left holding unplanned credit risk exposures in their 'warehouses' awaiting distribution or find it difficult to close out positions, as was apparent in synthetic US sub–prime mortgage markets in February. [129]

We will discuss the extent to which market participants acted on warnings from the public authorities and whether there is a need to ensure that market participants heed such warnings in the future later in this Report.

The closure of the credit markets

93. Events in August 2007 provided the final trigger for the closure of global credit markets. On 7 August, German banks organised a bailout for IKB Deutsche Industriebank AG, which was in trouble because of its investments in sub–prime residential mortgage collateralised debt obligations. Around the same time two US mortgage finance companies —Countrywide [130] and American Home Mortgage Investments made announcements of significant losses flowing from US mortgage lending. The OECD reports that "in the wake of this event [IKB] and news of similar problems elsewhere, there was a major correction in the market for mortgage-backed securities" and that "mortgage-backed security spreads, in particular in the high-yield segment began to rise to unprecedented levels in early August".[131]

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[128] FSA, *Financial Risk Outlook 2007,* January 2007, p 29

[129] Bank of England, *Financial Stability Report*, April 2007, p 7

[130] *Countrywide reports 2007 Second Quarter Results*, Countrywide Financial, Press Release, 24 July 2007

[131] OECD, *Financial market Highlights,* November 2007

94. On 9 August, a French investment bank, BNP Paribas, suspended withdrawals from three of its hedge funds that had invested in sub–prime residential mortgage CDOs. BNP Paribas said in a press release that it had taken this step because "the complete evaporation of liquidity in certain market segments of the US securitisation market has made it impossible to value certain assets fairly regardless of their quality or credit rating". The BNP Paribas press release went on to say that the "situation is such that it is no longer possible to value fairly the underlying US ABS assets in the three above-mentioned funds".[132]

95. The announcement by BNP Paribas was the trigger for a sharp reappraisal of risk by investors. Repricing of risk was taking place through the course of 2007, demonstrated by widening credit spreads on a range of asset–backed securities, but the events of 9 August spurred a much sharper and more rapid move to reprice risk. The Governor of the Bank of England in his Belfast speech on 17 October 2007 explained that on 9 August:

> the unexpected revelation by a French bank [BNP Paribas]that its investment funds could no longer value their exposures to US sub–prime mortgage loans produced a sharp reappraisal of the risks they were taking by investors around the globe. The returns demanded by investors on all risky assets rose—from packages of bank loans to plain vanilla company shares—so the prices of those assets fell. And in some markets for complex financial instruments, investors realised that perhaps they did not understand as much about the nature of the risks involved as they should. So not only did asset prices fall, but the markets in some of these instruments virtually closed. There were no buyers.[133]

96. The Governor of the Bank of England explained to us that the increasing illiquidity of markets in structured finance products over the course of 2007 was an inevitable consequence of the complexity of such products. The Governor spoke of:

> parts of the financial system thinking that they could advise and invent instruments of ever-growing complexity and, at the same time, assume that the market in those instruments would always be deep and liquid. It is almost a contradiction in terms that if you invent an instrument that only a handful of people understand, it may demonstrate the kind of abilities that win you a Nobel Prize, but if it is not sufficiently understood by enough people, you cannot expect the market to be deep and liquid … [134]

97. Sir Callum McCarthy in a speech on 20 October 2007 in Washington DC said that events in the credit markets since mid-2007 comprised "a long overdue repricing of risk, which I hope will bring greater discipline to markets which had for sometime responded to world liquidity and the search for yield by compressing the spreads between low and high

[132] BNP Paribas, press release, 9 August 2007

[133] Speech by the Governor of the Bank of England, at the Northern Ireland Chambers of Commerce and Industry, Belfast, 9 October 2007, p 3

[134] Q 1688

risk investments".[135] Mr Corrigan also described the market turmoil as "a broad-based drive to re-price credit risk which took hold across broad segments of the credit markets that were by no means limited to sub–prime mortgages. The motivation associated with the market-driven effort to re-price credit risk was to enhance and strengthen credit terms from the perspective of credit suppliers".[136]

The closure of the money markets

98. From late July, as the exposure of a growing number of banks to US sub–prime loans became more apparent, the interbank money markets dried up with related interest rates reaching record levels in August. Despite ample global liquidity, liquidity froze in the money markets leading to what the Chancellor described as a "complete freezing of liquidity" which he added "was unprecedented in modern times".[137] The Chancellor of the Exchequer explained to us that the "fundamental problem was that, whilst there was plenty of capital available, the banks and other financial institutions became very reluctant to lend to each other and there was an acute shortage of liquidity".[138]

99. Paul Tucker explained to us that in understanding why banks became reluctant to lend "the key point … is the way this jumped from the capital markets into the banking markets or money markets" which was because "banks had provided very large committed lines of credit or liquidity to a lot of vehicles in the system" and that, "faced with an increased probability of the drawdown of these massive lines of credit, they [the banks] started to stockpile liquidity rather than lend in the term money markets".[139] The Governor explained that:

> banks that had relied on selling packages of loans in securitised form found that they couldn't sell them. Investment vehicles that held securitised loans have found it difficult to finance their holdings by borrowing. Faced with the possibility that they would have to finance these vehicles themselves, banks with spare cash have hoarded it and have become reluctant to lend to other banks beyond very short maturities.[140]

100. This 'liquidity freeze' caused serious problems because the effective closure of asset-backed securities markets as well as the leveraged loan markets left many financial institutions needing to fund growing 'warehouses' of assets that they had expected to distribute and not retain on their balance sheet. In addition, many banks were exposed through commitments—either formal or informal—to off-balance sheet vehicles or to counterparties which were now experiencing growing funding difficulties. Dr Martin

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[135] *The implications of globalised financial markets on regulation,* Speech by Sir Callum McCarthy, Chairman of the Financial Services Authority, at the IIF 25th Anniversary Annual Membership meeting, Washington DC, USA, 20 October 2007

[136] Ev 333

[137] Q 780

[138] Q 749

[139] Q 11

[140] Speech by the Governor of the Bank of England, at the Northern Ireland Chambers of Commerce and Industry, Belfast, 9 October 2007

Weale from the National Institute of Economics has argued that problems were compounded because many banks were believed to have invested in similar securities, so that banks felt they did not know enough about the solvency of other banks to which they might lend".[141] The consequence of these factors, the Chancellor of the Exchequer told us, was that the banks "simply stopped lending to each other".[142]

101. Paul Tucker told us that the closure of the commercial paper markets was a key part of the problem because many securities had been sold to investment vehicles, with many of these vehicles funding their purchases by issuing short-term commercial paper, a process we discussed earlier. Mr Tucker told us that "the fact that banks and these so called conduits were not able to raise commercial paper or were only able to raise commercial paper at very short maturities" was at the heart of the problem.[143] The Governor in his 12 September letter to the Committee, described the problems in the asset-backed commercial paper market:

> markets are now withdrawing short-term funding from such vehicles, a process not unlike a bank run. Many investment vehicles have been forced to shorten the maturity of their commercial paper, making their borrowing even more short–term and their maturity mismatch even greater. [144]

102. Mr Tucker went on to explain that these problems would not be resolved without "that market [commercial paper] being restored to something like normality", or alternatively, through 'reintermediation' by the banks. Mr Tucker concluded that it was "because of the latter possibility [reintermediation] that banks have been stockpiling liquidity and trying to protect themselves against that eventuality and that has been individually rational but collectively deleterious".[145]

Central bank intervention

103. The 'liquidity freeze' facing banks during 2007 led some UK banks to request additional liquidity from the Bank of England in August 2007, at zero penalty rate. As we discussed in The Run on the Rock, the Bank of England refused to agree to the banks' requests for three reasons: the banking system as a whole was strong enough to withstand the problems on its own; secondly, banks would gradually re–establish valuations of asset-backed securities, thus allowing liquidity to build up again; and thirdly, there would have been a risk of moral hazard if the Bank had given the banks what they asked for.

104. Meanwhile, other central banks appeared to be more proactive in their response to the unfolding events. In the Run on the Rock we set out the different responses of the US Federal Reserve and the European Central Bank to liquidity problems in August 2007, and

[141] Martin Weale, 'Northern Rock: Solutions and Problems', *National Institute Economic Review*, October 2007

[142] Q 783

[143] Q 93

[144] Ev 215

[145] Q 93

concluded that the Bank of England paid too much attention to the risk of moral hazard and should have adopted a more proactive approach.

105. However, the Bank of England later softened its position—agreeing to extend the range of collateral it would accept in providing liquidity to the banking sector on 20 September 2007. We concluded that such a facility should have been granted at an earlier stage. Subsequent actions by the Bank of England, including a coordinated operation by major central banks from around the world, are discussed in the next chapter.

4 Events since August 2007

Introduction

106. This chapter examines developments in financial markets since August 2007, focussing on problems in the banking sector, including the admission of large losses by a number of banks involved in securitised markets. Uncertainty about the scale and extent of losses in the banking sector resulting from exposure to sub–prime mortgages and consequent concerns about the adequacy of bank capital have both impeded the renewed smooth functioning of global money markets. These problems in the banking sector led to subsequent coordinated money market interventions conducted by central banks in December 2007, to provide liquidity to the banking sector as well as to reduce the threat that problems in the banking sector would feed through to the real economy.

107. In December 2007, the Governor of the Bank of England appeared before us and summarised developments in financial markets since his last appearance before the Committee in September 2007. The Governor told us that problems in the financial sector still remain, before going on to say that "a painful adjustment faces the global banking sector over the next few months as losses are revealed and new capital is raised to repair bank balance sheets". The Governor added that "uncertainty about the possible scale and distribution of losses means that interbank lending rates have risen further relative to expected official interest rates. The behaviour of those spreads has been very similar in the sterling, dollar and euro markets, exacerbating concerns about a 'credit crunch' in the major industrialised countries."[146]

Growing problems in the banking sector

108. The period since August 2007 has seen a period of adjustment in the banking sector. Investor reappraisal of risks within asset-backed securities and leveraged loans has caused an unanticipated expansion of major UK banks'—and other international banks' balance sheets. The Bank of England, in its October 2007 Financial Stability Report, explained that this process of "reintermediation" has operated through two channels:

> the crystallisation of warehousing risk and off balance sheet commitments. Both have resulted in additional funding and capital requirements for UK banks, potentially impeding their ability to extend new lending to the household and corporate sectors.[147]

109. The reduction in investor demand for asset-backed securities has required banks to hold on their balance sheets for longer than intended assets which were originally envisaged for securitisation. As discussed in chapter two, these underlying assets intended for securitisation will have been funded on a short-term basis only, in anticipation of their

[146] Q 1608

[147] Bank of England, *Financial Stability Report*, October 2007, p 32

subsequent removal from the lender's balance sheet. However, the inability of banks to issue and distribute asset-backed securities as intended has meant that banks have been left needing to fund growing stocks (or 'warehouses') of assets that they had not expected to retain on their balance sheet, this in turn representing an unanticipated increase in funding requirements.

110. As discussed previously, many banks established off balance sheet vehicles, including conduits and structured investment vehicles prior to mid–2007. These vehicles have been an important source of demand for structured credit products and have been funded largely through the issuance of asset-backed commercial paper. However, as uncertainty about the value of their assets has increased, the cost and availability of funding to these investment vehicles has tightened as we discussed in chapter three. In consequence, the drying up of liquidity has forced some banks to support their sponsored asset-backed commercial paper conduits and structured investment vehicles, and in some cases to take these vehicles' assets back on balance sheet, adding to pressures on the banks' capital.[148] William Mills, Chairman and Chief executive of City Markets and banking, Europe, Middle east and Africa, Citigroup, explained to us that Citigroup had such sponsored vehicles with "outside investors who have provided the equity to support these vehicles". Mr Mills went on to explain that Citigroup's exposure to sponsored vehicles:

> arises from the fact that from a business model point of view they are funded short term and their assets are long term. What the market is trying to estimate is, if, in fact the liquidity crisis continues, will we, Citigroup, provide the liquidity to fund these vehicles so they do not have to go into an asset disposal mode, especially in an environment where people feel that that would just add more fuel to the fire.[149]

Mr Mills went on to explain that the support Citigroup was providing to off-balance sheet vehicles was motivated by reputational considerations, telling us that "There is the moral hazard issue as to whether or not from a reputational point of view if we do not step in and support these vehicles it will somehow hurt our reputation in the market".[150]

111. The Governor of the Bank of England, in his letter of 12 September 2007 to the Committee, explained that as a consequence of these funding difficulties:

> Some investment vehicles will need to be wound up. In many cases, however, the sponsoring bank will have written a backup line to the vehicle, guaranteeing its funding. Many of the securitised loans may now be re–priced, restructured or taken back by the banks. A process is starting that will expand the balance sheet of the banking system. But how far that process will go is hard to tell.[151]

112. The Governor explained to us in our September 2007 evidence session the consequences for UK banks of taking off–balance sheet vehicles back onto balance sheet:

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[148] Bank of England, HM Treasury, FSA, *Financial stability and depositor protection*, January 2008, p 21

[149] Q 1229

[150] Q 1230

[151] Ev 215

> The UK banking system as a whole is well-capitalised. In this context we should be grateful that banks did make profits in the last five years. They have a large capital cushion. They can take the conduits and vehicles that they set up in recent years back on to their balance sheets. It will take a little time and the banks will make lower profits than they would have wished but there is no threat to the stability of the banking system.[152]

Banking losses and valuation difficulties

113. Concerns in the banking sector were initially focussed on attempts by banks to protect their liquidity position, but as the Governor of the Bank of England noted in his January 2008 Bristol speech, attention has now turned to a second and more fundamental concern. The Governor stated that "as a range of asset prices fell, banks began to report large losses" and that "uncertainty about the scale and location of losses led to concerns about the adequacy of bank capital and hence the ability of the banking system to finance continued economic expansion".[153] In evidence to us, the Governor explained that:

> the most important step that is required here is that the private sector (and it can only be the private sector) needs gradually to restructure and re–price many of those complex instruments which people are now very reluctant to lend against or buy, and that will take time, but the process is slowly beginning.[154]

114. The investment bank BNP Paribas' 9 August 2007 announcement underscored the difficulty for financial institutions in valuing complex financial instruments. Instruments such as asset–backed securities are difficult to value as they are often complex and frequently trade in illiquid markets, if they are traded at all. Market participants commonly use three types of valuation techniques. These are:

- Mark–to–market, which refers to the use of quoted prices for actively traded, identical assets;

- Mark–to–matrix, which is a technique used for less actively traded assets, such as emerging market securities, municipal bonds, and asset-backed securities. Mark–to–matrix involves estimating a credit spread of the asset relative to a more actively traded instrument that can be priced more easily;

- Mark–to–model is a technique that market participants are often forced to use for the least liquid assets, including complex structured securities such as certain tranches of CDOs. Mark–to–model assigns prices based on statistical inference.[155]

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[152] Q 4

[153] Speech by the Governor of the Bank of England, at a dinner hosted by the IOD South West and the CBI, at the Ashton Gate Stadium, Bristol, 22 January 2007

[154] Q 1675

[155] IMF, *Credit Market Turmoil Makes Valuation Key,* IMF survey magazine, IMF research, by Manmohan Singh and Mustafa Saiyid, January 2008

Mr Corrigan explained that the credit re-pricing process was "hindered by the break down in the price discovery process for some classes of complex financial instruments including but not limited to sub–prime mortgages and their derivatives such as CDOs" and that as "the markets for such instruments became illiquid, the price discovery process was further impaired".[156] The British Bankers Association summed up the valuation difficulties thus: "it became harder to mark to market the value of securities a firm held—because there was no market to mark to".[157]

115. The absence of market quotes has forced market participants to rely more heavily on mark–to–model as opposed to mark–to–market or mark–to–matrix techniques. However, the use of pricing models that relied on historical data was impaired by the fact that the recent performance of some sub–prime loans has been much worse than the record would have suggested, causing valuation models to break down.[158]

116. The Governor explained to us that the process of restructuring and repricing complex instruments would be a lengthy process, telling us that the Bank of England was encouraging financial institutions to move as quickly as possible in this process. The Governor went on to outline some of the difficulties of restructuring and repricing products:

> It is not easy, because when markets are open, and deep and liquid, then marking to market, as is the current convention for establishing losses, makes a great deal of sense and can be done without an enormous degree of exceptional effort, but once those markets have closed, it then becomes extraordinarily difficult to know at what prices you should value some of those instruments, and that is exactly the difficulty that some of the banks have had.[159]

117. Witnesses from the investment banking sector also explained the difficulties for institutions trying to value complex instruments and ascertain losses. Mr Mills from Citibank told us that:

> What occurred in August and September was the fact that these markets stopped functioning and so there was no visible trading taking place. Typically, investment banks set their prices on their inventory and their positions based on the visibility of other trades that are taking place in the marketplace. Therefore for a period of time roughly two or three weeks—investment and commercial banks had to come up with a different methodology for establishing values on their portfolios and fundamentally had to deconstruct these complex securities, look at the underlying collateral and come up with a valuation. So, there was a period of time when there were significant differences between institutions as it relates to that. I think that most of those have

[156] Ev 333

[157] British Bankers' Association submission to the Tripartite authorities: recommendations regarding financial stability, regulatory coordination and issues in the international mortgage backed securities and credit markets, British Bankers' Association, p 21

[158] IMF, *Credit Market Turmoil Makes Valuation Key,* IMF Survey Magazine, IMF Research, by Manmohan Singh and Mustafa Saiyid

[159] Q 1697

> converged at this point. I believe that given the level of disclosure that has been forthcoming through the month October that those price distortions should not be as great as they were in September. [160]

118. Mr Palmer told us that "the biggest problem is that there is no visible benchmark in the market which is normally where you start. When that does not exist you have to use your best efforts through statistical analysis."[161] Mr Palmer went on to say that "the modelling process is very complex and must take into account an estimate of what is likely to happen in the economy. There is always an element of judgment in it".[162] Mr Mills explained that "if there is a lack of marketplace and no visible price benchmarks … you have to consider the underlying collateral and cash flows on that collateral".[163]

119. The fall in asset prices for a wide range of asset-backed securities has led to large losses for many banks and a growing number of banks and other large financial institutions have begun the process of estimating and reporting losses resulting from their exposure to the sub–prime mortgage market in the USA. We asked representatives from the investment banks, when they came to give evidence to us in October 2007, about the consequences of reported losses and writedowns for individual financial institutions.

120. Lord Aldington, from Deutsche Bank, confirmed that some of the large investment banks had to varying degrees taken losses and that those losses "have been absorbed within their capital base and loss reserves" adding that speaking for Deutsche Bank, "we are in a healthy position and will move forward".[164] Mr Palmer, from UBS, told us that "we have seen the larger institutions which have taken losses adapt and modify. We have seen changes of management as they take responsibility and efforts to adjust and improve risk management systems".[165] Mr Corrigan, from Goldman Sachs, said that:

> very substantial losses have been incurred by a broad cross-section of financial institutions over the past several quarters. I observe that in some ways it was a testimony to the work of those institutions over the years, including the supervisory community, that they were able to absorb those losses as well as they did. As far as I know, despite the size of these losses in the major institutions none appears to threaten their viability.[166]

121. We asked Professor Wood about the wider financial stability consequences of the losses in the banking sector. Professor Wood told us that these losses:

> make the institutions which have lost capital more fragile than they were before they lost capital, but one would hope it also makes them more cautious in the future,

[160] Q 1202

[161] Q 1208

[162] Q 1209

[163] Q 1211

[164] Q 1198

[165] Q 1200

[166] Q 1199

> which makes them less fragile. So, in the short term, yes, they are more fragile, in the longer term perhaps not.[167]

122. Since we took evidence from the investment banks, there have been further announcements of losses in the banking sector. For example, Morgan Stanley reported a fourth quarter 2007 writedown, stating in a press release that "the additional $5.7 billion writedown of US sub–prime and other mortgage related exposures in November, and the $3.7 billion writedown as of 31 October, result in a fourth quarter writedown of approximately $9.4 billion".[168]

123. Similarly, Citigroup reported a fourth quarter net loss of $9.83 billion reflecting "write-downs on sub–prime related direct exposures in fixed income markets and increased credit costs related to US consumer loans. Results include $18.1 billion in pre–tax write-downs and credit costs on sub–prime related direct exposures in fixed income markets".[169] A third bank to report heavy losses was UBS which "reported around $12 billion in losses on positions related to the US sub–prime mortgage market and approximately $2 billion on other positions related to the US residential mortgage market".[170]

124. The eventual scale of losses in the banking sector remains uncertain. Mr Bernanke, testifying before the Joint Economic Committee of the US Congress on 8 November 2007, estimated losses from exposure to sub–prime mortgages could total $150 billion.[171] German Finance Minister, Peer Steinbruck, speaking at the G7 conference in Tokyo in February 2008 is reported as saying that write–offs related to the US mortgage crisis could reach as much as $400 billion.[172]

125. The Governor explained in evidence to us that patience around the scale of losses in the banking sector was required until around February, March 2008 when:

> financial institutions will have had to reveal most of those losses marked to market and take whatever resulting steps are necessary to rebuild their balance sheets, and at that point I would hope that we will have made a big step forward.[173]

126. As losses have been declared, a number of financial institutions—including UBS, Merrill Lynch, Citigroup and Barclays amongst others—have sought to attract new capital in an attempt to rebuild their balance sheets. Much of this capital has come from sovereign wealth funds. For example, in November 2007, the Abu Dhabi Investment Authority, acquired a 4.9% stake in Citigroup for $7.5 billion,[174] whilst in December 2007, UBS

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[167] Q 937

[168] *Fourth quarter and full year results,* Morgan Stanley,19 December 2007

[169] Citigroup press release, 15 January 2008

[170] UBS press release, 30 January 2008

[171] Remarks by Ben Bernanke at hearing of the Joint Economic Committee on 8 November 2007

[172] 'Subprime losses could rise to $400bn', Financial Times, 20 February 2008

[173] Q 1675

[174] Citigroup press release, 26 November 2007

announced an investment by the Government of Singapore Investment Corporation in return for a potential future stake in the bank.[175] UK banks have also been involved in deals with sovereign wealth funds with, amongst others, Temasek Holdings from Singapore acquiring a stake in Barclays and Dubai International buying a stake in HSBC Holdings.

International coordinated action by central banks

127. Due to continued problems in global money markets, on 12 December 2007, joint action by the Bank of Canada, the Bank of England, the European Central Bank, the Federal Reserve, and the Swiss National Bank was announced.[176] The Bank of England stated that "the total amount of reserves offered at the 3-month maturity will be expanded and the range of collateral accepted for funds advanced at this maturity will be widened".[177] The Governor of the Bank of England explained these moves demonstrated that "central banks are working together to try to forestall any prospective sharp tightening of credit conditions that might lead to a downturn in the world economy".[178]

128. The Governor suggested that, by December 2007, a shortage of liquidity was no longer the key issue affecting the banking sector, and that, while in "August and September when the banks were trying to accumulate as many liquid assets as possible" the "large banks are now awash with cash":[179]

> The issue is not whether they have enough cash; the issue is whether they are willing to lend, and in recent weeks (and this was the reason for the coordinated action and the concern shared by all central banks) what has become evident is that banks are concerned about the capital position of other banks. They do not know where the losses resulting from the array of derivative financial instruments will finally come to rest, and, I think, in the last four weeks we have also seen a more disturbing development, which is that the banks themselves are worried that the impact of their reluctance to lend collectively will lead to a sharper downturn in the United States and perhaps elsewhere, thus generating further losses outside the housing and financial sector which will feed back onto bank balance sheets and reinforce their reluctance to lend because of the need to generate more capital. That concern is a serious one, because it does hold out the prospect that, if banks behave in that way, there will be a self-reinforcing downturn in credit and activity.[180]

129. The coordinated action by the central banks was taken to prevent this "self-reinforcing downturn" until after the year-end, by when the Governor hoped "banks will gradually realise that, once all the losses have been revealed and once they have taken steps to rebuild

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[175] UBS press release, 10 December 2007

[176] 'Central Bank Measures to Address Elevated Pressures in Short-term Funding Markets', Bank of England News Release 12 December 2006

[177] *Ibid.*

[178] Q 1608

[179] Q 1610

[180] *Ibid.*

the capital of their balance sheets, which several big banks have already done, then conditions will return to a more sustainable position".[181] We discuss problems in the banking sector and the steps banks have taken to rebuild their balance sheets in the following section.

130. The Governor argued that the coordinated action of 12 December achieved the objective of demonstrating that the central banks were working together:

> One [objective] was to demonstrate that the central banks were working together—perhaps that had not been as evident as it might have been since August, and, secondly, it was a clear recognition that all the central banks were saying to the market, Yes, we do understand the deterioration in sentiment in credit markets, which had been very evident over the previous four weeks, and we are conscious of the concerns that you have and we are determined to take whatever set of policy action is necessary to ensure that we do not see a serious downturn in the world economy.[182]

131. The Governor doubted that the coordinated action would, of itself, lead to a significant reduction in inter-bank interest rate spreads, but thought that "the demonstration that central banks are working together is important".[183]

132. The 12 December operation by the Bank of England did not involve a specific penalty rate, in contrast to its operations earlier in the period of turmoil. When asked whether this was a reversal on his policy, the Governor of the Bank of England disputed such an interpretation. He felt that the 12 December auction process would impose a penalty rate on those who participated, and that in fact this auction saw a reduction in the range of collateral being accepted, when compared with previous term tenders offered by the Bank of England.[184] Pressed further on whether the Bank of England had given up on the principle of the penalty rate, the Governor replied:

> we have not given it up, in the sense that the auction this morning that was conducted did produce an effective penalty rate of around 60 basis points in terms of the interest rate which people obtain money against this wider collateral; so the mechanism for doing it did, in fact, produce exactly that; but the nature of the problem in the last four to five week has changed quite markedly, and when that changes we too will change. When I sent my document to you in September before coming on 20 September, I made very clear in it that the judgments we were making about the nature of operations are ones that we looked at almost daily, and in the last four or five weeks there has been a palpable sense of (I use the word) fear in financial

[181] 'Central Bank Measures to Address Elevated Pressures in Short-term Funding Markets', Bank of England News Release 12 December 2006

[182] Q 1609

[183] Q 1733

[184] Q 1611

> markets about the capital position of banks, and that was a point where I think all of us in central banks decided that, collectively, we needed to take action.[185]

133. **The decision of the Bank of England to take part in coordinated action with other central banks in December 2007 is to be commended. We will continue to monitor the Bank's actions, and consider the effects of continued financial market disturbances on the macroeconomy as part of our regular work scrutinising the Inflation Reports of the Bank of England.**

Real economy consequences of banking losses

134. Dr. Andrew Sentance, an external member of the Bank of England's Monetary Policy Committee, told us in September 2007 that there had not then been much impact on the real economy from the problems in the credit markets, but that "we would expect it to take some time if there are going to be impacts" and that it "would most likely be through the cost of borrowing and through the availability of borrowing in various forms, both to companies and individuals".[186]

135. Since September 2007, signs have begun emerging that the financial market turmoil is beginning to have an impact on the real economy. There are strong indicators that recent developments in financial markets have begun to affect the supply of secured credit to households and corporations with banks increasingly cutting back their lending. The Bank of England's December 2007 Credit Conditions survey reported that:

> the availability of secured credit to households had been reduced in the three months to mid–December, and that there had been a marked increase in spreads on secured lending. Looking ahead, lenders expected a further reduction in secured credit availability. A small reduction in the availability of unsecured credit to households over the past three months was reported. Lenders reported that they had reduced corporate credit availability significantly, in line with their expectations in the Q3 survey. Lenders expected that corporate credit availability would be reduced further over the next three months.[187]

Professor Buiter also highlighted this potential real economy impact in evidence to us:

> In the short term, by impairing their capital or at least reducing the margins, it will make them more reluctant to lend, and that means that the cost and availability of loans for the real economy is going to be more restricted in times to come, so a net contraction on demand is imposed.[188]

Recent research by Ernst and Young (EY) shows that profit warnings at the end of 2007 were at a six year high. The largest single number of warnings in the EY report was

[185] Q 1732

[186] Q 148

[187] Bank of England, *Credit Conditions Survey,* December 2007, p 3

[188] Q 937

attributed to the problems in the US sub–prime housing market and the subsequent marked drop in the availability of credit. The Governor, in his 22 January speech, acknowledged the fact that developments in financial markets and the banking system have started to affect activity in the economy more widely, stating that "interest rates charged to both households and companies have risen relative to Bank Rate, reversing the relative fall in the year or so" before going on to warn that:

> tighter conditions will discourage borrowing to finance spending on residential and commercial property, on business investment and on consumption. The impact on property prices is already clearly visible. Commercial property prices have fallen by 12% since the middle of last year. And, after rising sharply earlier in 2007, house prices stagnated in the final quarter. Although there is a considerable stock of equity in owner occupied housing, with banks tightening the supply of both secured and unsecured credit, consumers will find it more difficult to borrow to finance spending. So in 2008 it is likely that a less buoyant housing market will go hand in hand with slower growth of consumer spending.[189]

136. The impact of the financial market turbulence since August 2007 has also led to a downward reassessment of economic growth forecasts in many developed countries, including the UK. The UK Government downgraded its forecast for GDP growth in 2008, from 2.5% to 3% at the time of the 2007 Budget, to 2 to 2.5% in the 2007 Pre-Budget Report.[190] In our Report on the 2007 Pre-Budget Report we acknowledged that the Government had downgraded its forecast for economic growth in 2008 due to the effects of both the rises in interest rates in the first half of 2007, and the recent disturbances in financial markets. We cautioned, however, that "the risk remains that the credit crunch will have a greater macroeconomic effect than expected".[191]

137. **As the Governor of the Bank of England has said, uncertainty about the scale and location of losses has led to concerns about the adequacy of bank capital and hence the ability of the banking system to finance continued economic expansion. There are now growing signs that developments in financial markets are feeding through to the wider economy in the United Kingdom. The continuing health of the UK economy therefore depends to a significant extent upon the banking sector's ability to re-establish reliable pricing and the restoration of confidence in each others' balance sheets. A prolonged failure to do so by the industry would have implications for economic growth. We recognise that some banks have already taken steps to establish losses and repair balance sheets. Nevertheless, the risk remains that if the banking sector does not put its house in order then the problems in that sector will have a significant adverse macroeconomic effect.**

[189] Speech by the Governor of the Bank of England, at a dinner hosted by the IOD South West and the CBI, at the Ashton Gate Stadium, Bristol, 22 January 2007

[190] HM Treasury, *Budget 2007*, Table B4, p 252; HM Treasury, *Pre-Budget Report and Comprehensive Spending Review 2007,* Table A3, p 144

[191] Treasury Committee, Second Report of Session 2007–08, *The 2007 Pre-Budget Report,* HC 54–I, para 6

The impact on private equity

138. The private equity sector has also been impacted by the market turbulence since mid-2007. As we noted in our Report on private equity, "looking at leveraged buy-outs alone, completions in the first half of 2007 were over £25bn, close to the full-year record in 2006 of £26.5 billion".[192] However, whilst private equity leveraged buy-outs continued at a rapid pace until early summer 2007, since August 2007 the flow of new leveraged buy-outs has come to a virtual standstill.[193]

139. Research by BDO Stoy Hayward indicated that "market turbulence in August and September 2007 has led to fewer deals being completed at the top end of the market (£250 million plus) as banks look to steer clear of post-deal syndication risk". BDO went on to state that "bank debt is still readily available in the mid-market and particularly for sub £50 million deals where banks can hold the debt facility without the need to sell down post-deal". BDO went on to say that on deal values between £50 million and £250 million, banks were having to club together pre-deal to provide debt facilities, thereby avoiding syndication risk, but making for a longer deal process.[194]

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[192] HC (2006–07) 567–I, para 11

[193] Bank of England, *Financial Stability Report*, October 2007, p 27

[194] *Private Company Price index Q3,* BDO Stoy Hayward, Q3 2007

5 International action

Overview

140. A number of initiatives have already been established at the international level to analyse the underlying causes of the market turbulence since mid-2007. The G7 has asked the Financial Stability Forum, which was established in 1999 and, is tasked with promoting international financial stability and consists of national authorities responsible for financial stability in significant financial centres, to examine the causes of the recent market turbulence, with a focus on events in the markets for structured products. The Financial Stability Forum working group presented an initial report on its work programme to the G7 in October 2007 and intends to prepare a draft report to the G7 in February 2008 with a final report to be presented to the G7 in April 2008. The working group has also said that it intends to examine the authorities' capacity to respond to episodes of market turbulence, relating to the tools and instruments available to central banks and supervisors in times of distress and coordination between them at the national and international level.[195]

141. Similar work on the causes of the recent market turbulence and appropriate policy responses is also under way in the European Union (EU). On 19 October 2007, the Prime Minister, Chancellor Merkel of Germany and President Sarkozy of France issued a joint declaration regarding recent financial market developments. The joint declaration stated that "as a key global financial marketplace, the European Union should have a strong role in developing the global response to these events". The Economic and Financial Affairs Council (Ecofin) has announced a programme of work on the recent market turbulence, which European Union leaders are to discuss at the Spring European Council.[196]

142. The Government, in its January 2008 discussion paper on financial stability and depositor protection, stated that there was considerable international consensus on the key issues raised by recent events and that, broadly speaking, work by the Financial Stability Forum and the EU was focussing on:

- Effective prudential risk management within banks and other financial institutions, including liquidity, market and credit risk management practices;
- Accounting and valuation procedures for complex structured products;
- The role of credit rating agencies in structured finance; and
- Prudential regulation of financial institutions, particularly in relation to their exposure to off-balance sheet vehicles.[197]

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[195] FSF Working Group on market and institutional resilience, Preliminary report to the G7 Finance Ministers and Central Bank Governors, 15 October 2007

[196] Joint Declaration of Chancellor Merkel, President Sarkozy and Prime Minister Brown regarding recent financial market developments, Lisbon, 19 October 2007

[197] *Financial stability and depositor protection: strengthening the framework*, HM Treasury, Bank of England and Financial Services Authority January 2008, p 24

We have already discussed the issue of effective prudential risk management within banks and other financial institutions in our Report on Northern Rock.[198] We discuss international initiatives on the other issues being considered by the Financial Stability Forum and European Union as well as other international actors in this chapter.

The importance of action at the international level

143. The UK Government, in its January 2008 discussion paper on financial stability, has stressed that, in addition to reform in the UK, it is important that the international community responds in a coordinated way to recent events. The Chancellor reiterated the importance of taking appropriate action at the international level when he gave evidence to us. The Chancellor told us that:

> The Forum for Financial Stability is looking at this, it is also being looked at the European Union level, I will be discussing it with my French, German and Italian counterparts next week and, when the Financial Stability Forum reports at the G7 in Japan in February, I hope we will have proposals in front of us not just in relation to the off-shore SIVs but also in relation to credit rating, in relation to early warning systems, a whole range of matters which need to be looked at and which, frankly, we can deal with to some extent here in the United Kingdom but we actually need international co-operation.[199]

144. We also asked the Chancellor of the Exchequer about progress on action at the international level. The Chancellor explained that because "so many countries are affected by these problems … there is a political momentum which I think is very helpful".[200] He added that one of the Government's priorities was to strengthen the role of the IMF in relation to these international problems.[201]

145. Sir John Gieve also stressed the importance of action at the international level, agreeing with the Chancellor that the response to the turmoil "has to be done on an international basis, because these are international instruments". He explained that the Bank of England was "working through Basle, where the director of financial stability in the Bank is leading the work on liquidity, and in the Financial Stability Forum, where I and Callum McCarthy are involved, to try and get an international policy consensus on how to address these issues".[202] Angela Knight, Chief Executive of the British Bankers' Association, told us that there are already a number of organisations and institutions in place and that "the best way to make those sorts of global institutions work properly is for countries which have big financial centres such as ourselves to fully engage with global standards". Ms Knight went on to say that:

198 HC (2007–08) 56–I

199 Q 1852

200 Q 1858

201 Q 1863

202 Q 1695