National Audit Office

Maintaining financial stability across the United Kingdom's banking system

Appendices Three to Eleven

Contents

Appendix Three

The Special Liquidity Scheme

When was it announced?

21 April 2008

Why was it needed?

It had become difficult for banks to finance existing holdings of assets created from packages of bank loans, most notably mortgage backed securities. As a result, banks had on their balance sheets overhangs of illiquid assets, which they could not readily sell or use to secure borrowing, thereby exacerbating the liquidity crisis.

What options were considered?

Apart from the Special Liquidity Scheme, the Bank considered that there were three other options:

- do nothing;
- lending for a shorter period (but with attributes otherwise similar to the Scheme); and
- extending the scale of existing sale and repurchase agreements ("repos") made available by the Bank (including Residential Mortgage-Backed Securities) – a repurchase agreement is a collateralised loan in which a bank sells high quality securities to the Bank of England and agrees to repurchase the same securities at a fixed price at a later date.

Why was the Special Liquidity Scheme chosen?

The key advantage of the Special Liquidity Scheme was that it was for a term maturity against legacy assets only. The asset swaps were long-term (banks would have the opportunity to renew the transactions for up to three years). This would provide banks with certainty about the liquidity that was needed to boost confidence. The scheme was designed to deal with the overhang of existing assets on banks' balance sheets. To that end only securities formed from loans existing before 31 December 2007 were eligible.

What is it meant to do?

The Special Liquidity Scheme allowed banks and building societies to swap, for a fee, high quality but illiquid assets such as mortgage-backed securities for liquid Treasury Bills, for a period of up to three years. By holding liquid Treasury Bills, banks would be able to raise cash in the market for commercial repurchase agreements.

It was judged that increased liquidity would help to preserve confidence in the UK's Banking system as a whole, subject to any banks having fundamental solvency problems. The Scheme was explicitly designed to provide temporary liquidity support and buy time for banks to restructure their balance sheets.

How did it work?

The Treasury, through the Debt Management Office, issued new Treasury Bills to lend to the Bank of England. The Bank then entered into a swap agreement with the participating banks, allowing them to swap their high credit quality but illiquid securitised assets for Treasury Bills. To minimise the risks to the Bank of England, banks using the Scheme needed to provide securities of significantly greater value than the Treasury Bills they received – known as a valuation haircut.

Furthermore, the collateral is revalued on a daily basis. If the haircut adjusted value falls below the value of the Treasury Bills received, participant banks have to provide additional collateral, or return some Treasury Bills to ensure that the Bank of England is sufficiently collateralised.

Which banks were eligible for the scheme?

To avoid stigma being attached to any individual bank using the Scheme, all major banks and building societies agreed to participate, with no disclosure made about individual usage. UK banks and building societies and other financial institutions that are eligible for the Bank's Operational Standing Facility (including UK branches of banks from European Economic Area countries) were able to take part in the scheme.

What is at stake?

The Treasury indemnified the Bank against capital losses on any of the swap transactions under the Scheme.

Treasury Bills worth £185 billion were swapped with participating banks. The Scheme was designed to avoid taxpayers suffering from potential losses under the indemnity, with credit risk of the swapped assets remaining with the banks. For a loss to occur, the following risks would have to crystallise:

- the counterparty bank must default and be unable to return the Treasury Bills; and
- the collateral must be worth less than the Treasury Bills lent to the bank.

Since the collateral has a greater value than the Treasury Bills issued against it, and that margin is maintained on a daily basis, the risk of a loss on a particular swap is small. Even if a participating bank were to default leaving the Bank of England with illiquid assets, the Bank could choose to hold the assets for a period, or even until maturity, earning a return on them over their lifetime.

If a loss was eventually incurred by the Bank on a particular swap transaction, the Bank of England can call on the Treasury indemnity only if the loss exceeds any surplus accruing to the Bank from the fees charged.

What are the key measures of success?

Improvements in the liquidity position of and restored confidence in UK banks and building societies as a whole. Possible indicators of success include:

- preventing a generalised liquidity crisis from affecting all parts of the UK's banking system;
- a fall in estimates of banking sector liquidity premia, such as the margin between the rate at which banks can borrow money without providing security (three-month sterling LIBOR) and a measure of expected official interest rates; and
- a fall in banks' Credit Default Swap spreads, indicating that markets consider that banks are less likely to default.

Although both of the latter two indicators have fallen since October 2008, it is impossible to attribute the falls directly to the Special Liquidity Scheme. This is because other measures put in place, including the Asset Purchase Facility, will have affected market perceptions and the availability of funds to the banks.

Developments since initial announcement?

Following the collapse of Lehman Brothers, the Bank announced on 17 September 2008 an extension of the Special Liquidity Scheme window by three months, from 21 October to the end of January 2009.

On 8 October 2008, as part of a wider support package to the UK financial sector, the Treasury announced up to £200 billion would be made available under the scheme, up from the estimates of initial usage of £50 billion.

The Scheme closed to further asset swaps at the end of January 2009, but will remain in place until January 2012 to provide participants with continuing liquidity support.

As part of a policy to introduce permanent liquidity-insurance facilities, the Bank of England introduced a Discount Window Facility in October 2008.

Return to the taxpayer

The Bank is charging a market based fee equivalent to the difference between three-month sterling LIBOR and the general collateral repurchase agreement rate, payable every three months in arrears. Fee income was £573 million to February 2009 (Bank of England's annual report 2009). The Treasury is currently expecting total fees generated over the lifetime of the scheme to be between £1.5 billion and £2 billion.

Exit strategy

At the end of the Scheme, the Bank will swap back the eligible securities for Treasury Bills and return the bills to the Treasury, via the Debt Management Office.

Who is managing the scheme?

The Special Liquidity Scheme is a Bank of England scheme.

Appendix Four

Recapitalisation

When was it announced?	8 October 2008
Why is it needed?	Against a background of increasing turbulence in the financial markets during 2008, the Authorities considered that major UK banks were inadequately capitalised. The banks themselves were, however, reluctant to seek new capital from existing or new shareholders. If one bank tried to raise capital, investors might regard such a move as a signal that the quality of the bank's assets was worse than previously thought. In such circumstances, existing shareholders would be unlikely to buy new shares unless they were offered at a substantial discount to what would already be a depressed market price.
What other options were considered?	**Asset purchase:** Under this option, the Government would buy the banks' poorer quality assets, reducing the risk of default. But, if the Government was to avoid paying too much for the assets, it would need to conduct extensive due diligence; a process that would take months, time that a number of banks did not have. As the option could not meet immediate need and could create potential losses to the taxpayer, it was not pursued.
What other options were considered?	**Publicly-funded recapitalisation:** This would not have reduced uncertainty about the value of banks' assets, but the Bank considered that if equity injections were large enough, the uncertainty about asset values should become less critical. The Bank also considered that the banks could be provided with some "catastrophe" insurance against credit risk by offering them an option to sell assets at a guaranteed price in the future. **Asset protection scheme:** The FSA considered that a smaller recapitalisation, followed by a scheme to insure any future losses was preferable. The Government would need to raise less money for recapitalisation and future assistance would be contingent on future events. The Treasury started to develop such an insurance scheme in September 2008 and it was announced in January 2009.

Which banks were eligible?

To avoid stigma being attached to an individual bank raising capital through the scheme, the Government required all the major UK banks and the largest building society to raise capital either through the Government scheme or through private sector sources. It was up to the individual banks to decide which method to use. The institutions were:

Abbey;

Barclays;

HBOS;

HSBC Bank plc;

Lloyds TSB;

Nationwide Building Society;

Royal Bank of Scotland; and

Standard Chartered.

What was it meant to do?

The recapitalisation scheme was designed to ensure that the banks would be able to bear future losses, and would therefore not be at risk of insolvency. If this objective was achieved, the Government also expected that stronger bank balance sheets would encourage a resumption of wholesale lending and, therefore, increased lending to businesses and consumers.

How did it work?

The FSA in consultation with the other Tripartite authorities, conducted stress tests on the balance sheets of the UK's seven leading banks and largest building society. The stress tests were designed to show whether each bank would have sufficient capital to absorb losses that might ensue from a recession and to continue lending on normal commercial criteria.

The results of the stress tests were discussed with each of the banks and agreement was reached on the amount of capital they needed to raise. In considering how much capital each bank needed, the Treasury needed to balance:

- the cost to the public finances of over-capitalising the banks that opted to take part in the scheme; against
- the uncertainties involved in forecasting future losses and the availability of other options (such as purchasing or insuring assets) at a later date if losses were higher than expected.

What is at stake?	Five of the seven banks decided to raise capital through other means. RBS and Lloyds Banking Group opted to participate in the Government scheme. The Treasury purchased shares amounting to £20 billion in RBS (£15 billion in ordinary shares and £5 billion in preference shares) and £17 billion in the Lloyds Banking Group (£13 billion in ordinary shares and £4 billion in preference shares). A commercial interest rate was charged on the preference shares, and an injunction placed on the payment of dividends until the preference shares were redeemed.
What are the key measures of success?	Financial stability is maintained with no major UK bank becoming insolvent.
Developments since announcement	To strengthen their capital and their cash flows, both banks have repaid the preference shares. As a result taxpayers owned 70.33 per cent of RBS and 43.44 per cent of the Lloyds Banking Group, representing an investment by the taxpayer of £19.9 billion in RBS and £14.5 billion in the Lloyds Banking Group. Further capital injections of up to £39 billion were announced in November 2009.
Return to the taxpayer	The Treasury charged underwriting fees of just over £410 million for the recapitalisations, and an interest rate of 12 per cent on the preference shares purchased. Over time the Treasury may receive dividends on its ordinary shares now the preference shares have been redeemed. In redeeming preference shares in RBS, the Treasury charged the bank a commission of £24 million. In addition, £2.5 billion was returned to the taxpayer through Lloyds Banking Group's redemption of preference shares. The final return to the taxpayer will be dependent on proceeds from future sales.
Exit strategy	UKFI intends to sell the shares when it is most beneficial to the taxpayer to do so.
Who is managing the scheme?	UKFI

Appendix Five

The Credit Guarantee Scheme

When was it announced?

The scheme, together with the recapitalisation measures, was launched publicly on 8 October 2008, with details announced on 13 October.

In December 2008 and again in January 2009, the Treasury announced changes to the scheme.

Why was it needed?

During September 2008, the cost of borrowing money in the wholesale lending markets rapidly escalated and loan durations shortened as fears about the financial health of banks increased.

The Treasury considered that Government action was crucial to restore confidence in the wholesale lending market, otherwise funding difficulties risked pushing financially healthy banks into insolvency, threatening the stability of the entire UK financial system.

What is it meant to do?

The Treasury chose to restore confidence by providing a UK sovereign guarantee to wholesale lenders so that they would have the confidence to lengthen the durations of their loans.

The Treasury realised that there was a risk that the market would perceive that those who used the guarantees were financially vulnerable. To avoid this risk, the Treasury announced that it would allocate a share of the total guarantee to the eight most strategically important UK banks, and named them. It also retained a contingency for use by other institutions or members of the selected eight that had greatest need.

Which institutions were eligible to participate in the scheme?

Eligibility was limited to the eight named institutions invited to take part in the recapitalisation scheme (Abbey, Barclays, HBOS, HSBC, Lloyds TSB, Nationwide Building Society, Royal Bank of Scotland and Standard Chartered). Other UK incorporated banks and building societies could apply for inclusion. In reviewing these applications, the Government would give due regard to an institution's role in the UK banking system and in the overall economy.

A further condition of eligibility was that an applying institution had to have Tier 1 capital in the amount and in the form that the Government considered appropriate

What is at stake?

The Treasury provided an unconditional, irrevocable guarantee covering up to £250 billion of wholesale lending. The actual amount of wholesale lending guaranteed by the Government peaked at just under £140 billion in May 2009. The guaranteed amount has since slowly declined, and in early October 2009 was approximately £130 billion. RBS, HBOS and Lloyds TSB/ Lloyds Banking Group have made extensive use of the scheme.

The Treasury also imposed a three-year limit to the term of any guaranteed debt. Under the original arrangements, the guarantee would cease from April 2012.

Banks that issued Government guaranteed debt had to provide a counter indemnity to the Treasury for obligations of the bank which the Treasury has to honour under the guarantee. In the event of any borrowing bank becoming insolvent, the Treasury would, upon, honouring the guarantee, become an unsecured creditor of the bank.

How was the size and term of the scheme calculated?

The size of the scheme was a matter of judgement. The scheme was designed to support banks in accessing the wholesale markets.

The size of the scheme was considerably smaller than the banks' funding requirements, therefore the banks, in addition to securing funding by guaranteed instruments, also would have to seek funds that were not guaranteed.

When the Treasury set the three-year limit for the maximum term for guaranteed debt, it considered that the period was long enough to allow the banks to make necessary balance sheet adjustments so that by the latest April 2012, they would be able to function without guaranteed funding. The Treasury also expected that by the end of the scheme, market conditions would have normalised.

Return to the taxpayer

To protect the taxpayer and to encourage banks to seek out opportunities to borrow without the need for a Government guarantee, debt covered by the guarantee was priced on a commercial basis. The Treasury structured the fee for the guarantee so that it would not be too large to prevent banks from moving beyond borrowing in the overnight market, but sufficient enough to provide a reasonable return for the risks associated with the guarantee.

There were two key elements that the Treasury considered in determining the fee structure:

Institution-Specific Risk Measure – For each participating bank, the Treasury decided to use market priced premia for insuring against bank default losses (Credit Default Swaps (CDS)) to price institution-specific risk. To moderate extreme CDS values in September and October 2008, the Treasury opted to use the 12-month median value of the five-year CDS for the year ending 7 October 2008.

A charge for using the Government's credit standing. The Treasury considered two rates, 0.5 per cent or one per cent. It adopted the former, because the cumulative total charge would then be similar to the cost of funding that institutions were incurring in the months leading up to the collapse of Lehman Brothers in September 2008.

How does the fee structure work?

The bank issuing the guaranteed debt will pay a rate of interest determined by the market. For a three-year loan, the Treasury expected that the market would demand an interest rate slightly higher than the yield that an investor would receive by purchasing a gilt of the same duration. The higher interest rate would be needed mainly because the guaranteed debt would not be as liquid as a gilt. Based on the additional interest paid for Network Rail debt, the Treasury estimated that the premium would be about 0.4 per cent.

The Treasury's fee, comprising 0.5 per cent and the institution-specific risk margin, would be paid by the issuing bank directly to the Debt Management Office.

What are the measures of success?

In supporting continued financial stability, key measures of success included:

- banks using the scheme without stigmatisation; and
- banks re-entering unguaranteed wholesale lending markets as they recover.

The Treasury introduced an additional requirement under which large banks that issued new guaranteed debt after 9 April 2009 would have to abide by the Treasury's lending commitments.

Who is managing the scheme?

The Debt Management Office administers the scheme under the Treasury's supervision with advice from the Credit Guarantee Scheme Group (membership includes HMT, DMO, FSA, Bank of England and Treasury's legal advisers).

How has the scheme been changed since October 2008?

In December 2008, the Treasury completed a major review of the scheme and introduced a number of modifications.

The Treasury decided to allow banks to roll over up to one-third of the maximum guaranteed amount for up to a total of five years. It realised that market conditions were more severe than it had estimated in October. As a result, it expected that banks would continue to roll over guaranteed debt through to the end of the scheme in April 2012. With the Special Liquidity Scheme ending in January 2012, there would be a wave of refinancing required in the first quarter of that year. The change addressed concerns that investors had about the banks' ability to refinance their debt obligations in 2012.

The Treasury reduced its fee by 0.18 per cent. It observed that similar schemes implemented or planned by other nations were charging their banks a lower rate for guaranteeing debt. While wanting to avoid UK banks becoming dependent on the scheme for their issuance of debt, the Treasury accepted that it could retrospectively reduce the cost of the guarantee by measuring the 12-month median for the five year CDS for participating banks for the period July 2007 to July 2008.

In 2009, the Treasury extended the window in which banks could issue guaranteed debt. The original window was six months, closing on 13 April 2009. The extension increased the duration of the window through to end of December 2009. The scheme broadly aligned the scheme with the framework set out in the 12 October declaration on a concerted European action plan:

- allowing for arrangements up to five years; and
- permitting drawings through to 31 December 2009.

While the Treasury has not increased the size of the scheme, it recognises the risk that some banks may become reliant on issuance of guaranteed debt, resulting in demand for guarantees exceeding supply.

Appendix Six

The Asset Protection Scheme

When was it announced?	19 January 2009
Why was it needed?	The losses recorded against their assets were using up the banks' capital reserves, so they were reluctant to lend to the real economy.
What options were considered?	The Asset Protection Scheme was developed out of the options considered for recapitalisation of the banks. See Appendix Four.
What is it meant to do?	The Scheme is intended to restore confidence in the banks and get credit flowing again, by dealing with the losses associated with impaired assets. The scheme puts a floor to banks' exposure to losses associated with impaired assets. This should enable the healthier core of banks' commercial business to attract investments and deposits and make loans to creditworthy businesses and households.
How does it work?	From January 2009, the Treasury has provided protection to each participating institution against a proportion of future credit losses on one or more portfolios of defined assets, to the extent that credit losses exceed a first loss amount to be borne by each institution. The Government protection will cover 90 per cent of the credit losses exceeding the amount of the first loss, with the participating institution retaining the residual ten per cent exposure. Banks participating in the scheme will have to apply the Financial Service Authority's code of practice on remuneration. Participating institutions will also have to commit to lending conditions, which will be institution-specific, on a commercial basis.

How does it work?

The following categories of assets are eligible for inclusion in the scheme:

Corporate and leveraged loans.

Commercial and residential property loans.

Structured credit assets, including residential mortgage backed securities, commercial mortgage backed securities, collateralised loan obligations and collateralised debt obligations.

Assets proposed for inclusion in the Scheme have been subject to scrutiny and due diligence by the Treasury and its advisers.

The scheme will last at least five years. The duration will be consistent with the tenor of the relevant assets.

Which banks were eligible for the scheme?

UK incorporated authorised deposit takers including UK subsidiaries of foreign institutions with more than £25 billion of eligible assets. Applications had to be made by 31 March 2009.

On 26 February 2009, RBS announced its intention to place £325 billion of assets into the Asset Protection Scheme, and bearing a first loss of £42.2 billion.

On 7 March 2009, Lloyds Banking Group announced its intention to place £260 billion of assets into the Asset Protection Scheme, and bearing a first loss of £35.2 billion.

What is at stake?

The Government's maximum liability under the scheme was just under £457 billion, but has now been reduced to just under £200 billion following completion of negotiations in November 2009.

Key measures of success?

The Scheme was part of a package of measures announced in January 2009 to reinforce the stability of the financial system, increase confidence and enhance the capacity of the banks to lend.

Return to the taxpayer (see also next section setting out subsequent changes)

RBS agreed to pay a fee of £6.5 billion, at 50 pence each, in new irredeemable, non-voting B shares that will constitute core Tier 1 capital. In February 2009, the Government agreed to inject a further £13 billion of capital into RBS in exchange for B shares, at 50 pence each, and a further £6 billion of B shares, at 50 pence each, at RBS' option when agreement is reached on the Asset Protection Scheme.

RBS also agreed to defer certain tax assets for a number of years and to not claim tax losses and allowances on these assets.

The Lloyds Banking Group agreed to pay a fee of £15.6 billion in new irredeemable, non-voting B shares at 42 pence each that will constitute core Tier 1 capital.

The Treasury will recover professional fees incurred in setting up the Asset Protection Scheme from the participating institutions.

How has the scheme been changed since January 2009?

Negotiations on the Scheme were completed in November 2009, and a number of major changes made:

- Lloyds Banking Group will not participate in the Scheme, and instead will seek to raise additional capital of £21 billion through a rights issue to existing shareholders (£13.5 billion), and by swapping existing debt for contingent capital (£7.5 billion). The Treasury will take up its rights, investing a further £5.7 billion (net of an underwriting fee of £130 million) in the bank. The Government's shareholding will remain at 43 per cent. The Treasury will also receive a fee of £2.5 billion for the implicit protection provided by the taxpayer since the Scheme was announced in January 2009. Due to strong investor demand, on 23 November Lloyds Banking Group announced plans to increase the amount of capital raised from £21 billion to £22.5 billion.

- RBS will participate in the Scheme under revised terms. The assets insured are to be reduced from £325 billion to £282 billion and RBS will bear a larger first loss of £60 billion rather than the £42 billion previously agreed. RBS will pay an annual fee of £0.7 billion for the first three years, followed by £0.5 billion a year for the remaining life of the Scheme. In line with the original agreement, the Treasury will inject additional capital of £25.5 billion into the bank. To reflect the increase in the first loss borne by RBS, it will no longer be required to give up tax losses and allowances that it estimated to be worth between £9 billion and £11 billion.

How has the scheme been changed since January 2009?

- To protect RBS against a worst-case scenario, the Treasury has also committed to provide up to £8 billion of additional capital, in return for an annual fee of £320 million. The additional capital would only be drawn down if the bank's core Tier 1 capital ratio fell below five per cent of its risk-weighted assets. RBS also agreed to pay a minimum exit fee (net of fees already paid) if it leaves the Scheme of either £2.5 billion or 10 per cent of the amount of capital relief received through the Scheme.
- To fulfil State Aid requirements, the Treasury and the European Commission agreed that RBS and Lloyds Banking Group would dispose of retail and corporate banking assets over a period of four years.
- Both banks agreed that the existing commitments to increase lending would remain in place and that charging for current accounts and overdrafts would be transparent and fair. The banks also agreed to put in place a "Customer Charter" for lending to small and medium sized businesses to reinforce a commitment to meeting reasonable applications for finance from viable businesses.
- The banks agreed not to pay discretionary cash bonuses for 2009 to staff earning over £39,000 a year, and executive members of both boards agreed to defer all bonuses for 2009 until 2012.

Exit strategy

RBS can only exit the Scheme with the approval of the Financial Services Authority.

Who is managing the Scheme?

A new Asset Protection Agency, sponsored by the Treasury, has been established and will be headed by a separate accounting officer.

Appendix Seven

The Asset Backed Securities Guarantee Scheme

When was it announced?

Initial announcement on 19 January 2009; followed by details in the Budget on 22 April 2009, and separate documentation published by the Debt Management Office.

Why was it needed?

As the credit crisis deepened, the market for mortgage-backed securities closed. Banks' access to funding remained restricted, both through the wholesale and securitisation markets.

What options were considered?

The Crosby Review made a high-level recommendation that the Government should consider auctioning guarantees in a form that could be attached by issuers to AAA rated mortgage-backed securities issued to fund new lending. The Scheme built on this recommendation. It was developed to reflect changing circumstances and market conditions, and the need to limit taxpayers' exposure to risk.

What is it meant to do?

The scheme extends the funding options open to banks and building societies under the Credit Guarantee Scheme to residential mortgage-backed securities. In summary the measure is intended to:

- improve banks' and building societies' access to wholesale funding markets;
- help support lending to creditworthy borrowers;
- promote robust and sustainable markets over the long term; and
- protect the taxpayer.

How will it work

Under the scheme, the Treasury may provide two types of guarantee, credit or liquidity, but not both:

Credit: guarantees the timely payment of all amounts due to investors under the terms of the securitisation;

Liquidity: if, in certain circumstances, the terms of the securitisation require the issuer to buy back bonds from investors and the issuer is unable to do so, the guarantor will purchase the relevant bonds from the investor at the required price.

The guarantees are available for residential mortgage-backed securities, backed by mortgage loans secured over property in the UK, which are AAA rated at the time the guarantee is issued. The loans backing the securities:

- must have been originated not earlier than the beginning of 2008;
- the original loan to value ratio on each mortgage must not have been more than 90 per cent of the lower of purchase price, or the most recent valuation;
- the weighted average loan to value ratio across the all the loans should not exceed 75 per cent; and
- the underlying borrowers must not be a 'self-certified' or have an adverse credit history.

Which banks are eligible for the scheme?

As for the Recapitalisation and Credit Guarantee Schemes the major UK's major banks and one building society were eligible (Abbey, Barclays, HBOS, HSBC, Lloyds TSB, Nationwide Building Society, Royal Bank of Scotland and Standard Chartered).

What is at stake?

Guarantees allocated under the scheme were limited to at most £50 billion in total. No take-up so far.

What are the key measures of success?

The Scheme was part of a package of measures announced in January 2009 to reinforce the stability of the financial system, increase confidence and enhance the capacity of banks to lend, especially mortgage lending.

Return to the taxpayer?	As with the Credit Guarantee Scheme, the fees payable will be based on the participating institution's median five-year Credit Default Swap spread during the period July 2007 to July 2008. The only difference being the 25bps premium compared to 50bps in the case of the Credit Guarantee Scheme to reflect that this form of funding is secured against mortgage assets rather than unsecured.
What's the exit strategy?	The Scheme was to have closed on 22 October 2009, but its availability was extended to 31 December 2009. By late November 2009, the Scheme had not been used.
Who is managing it?	Debt Management Office.

Appendix Eight

The assets, liabilities and capital of banks

The balance sheet of a bank sets out three key pieces of information: how much the bank owns (assets); how much it owes (liabilities); and the value (capital) that can be attributed to the banks owners (its shareholders). One of the most important accounting principles is that "assets = liabilities + capital".

To maximise returns, major UK banks have operated with capital of between four and nine per cent of asset values. Consequently, a relatively small reduction in the value of assets will have a disproportionately large effect on a bank's capital, leading to concerns over solvency (see illustrative balance sheet below: a 10 per cent decline in the value of assets leads to a complete loss of capital).

Figure 1
Illustrative balance sheet before and after any loss in the value of loans

	Liabilities & capital (£bn)			Assets (£bn)	
	Before any loss in the value of loans	After a 10 per cent fall in loan values		Before any loss in the value of loans	After a 10 per cent fall in loan values
Deposits	60	60	Cash	6	6
Debt (including wholesale borrowing)	36	36	Securities	42	42
Capital (balancing figure)	4	-1	Loans	50	45
			Other Assets	2	2
Total	**100**	**95**	**Total**	**100**	**95**

Assets

Loans to individuals and businesses represent the majority of a bank's assets. Securities, such as holdings of government debt, usually make up the second largest component. Cash is often the smallest component of assets, since the interest earned on very short-term cash deposits with other banks is relatively low and cash needs to be kept on hand to meet withdrawals by customers.

Liabilities and capital

The majority of liabilities are deposits in the form of customers' current and savings account balances. The liabilities also include funds raised from bonds that the bank sells to investors and loans taken from other financial institutions. Capital represents the difference between assets and liabilities, including the initial payments for shares by shareholders and any profits retained by the bank.

Regulatory capital

When making a loan, a bank will take account of expected losses when determining the price to charge the customer. The bank's income should therefore cover expected losses, as well as the day to day running of the business. Unexpected losses are by their nature unforeseen, so banks need to hold capital as a buffer against these losses during periods of financial stress.

Given the importance of deposits to consumers and the role of banks in maintaining economic stability, all banks regulated by the FSA are required to hold a minimum amount of capital, usually expressed as a percentage of the value of a bank's risk-adjusted assets. FSA regulations on capital operate to protect depositors in two main ways:

- By requiring banks to hold a certain amount of core capital (ordinary shares and retained profits) capable of absorbing unexpected losses while the bank is solvent, thus reducing the probability of a bank failing.
- If a bank does fail, other forms of capital (often referred to as subordinated debt) act as a buffer in protecting depositors' claims in insolvency. This is achieved by ensuring that such capital ranks behind the claims of depositors.

Appendix Nine

Measures adopted in other countries[1]

Summary

- All the countries listed have put in place measures to guarantee the issuance of debt, and to increase the amounts of capital held by banks.
- The UK and the US have also implemented additional measures to provide liquidity support across their banking sectors, and to revive the securitisation markets.

Country \ measures	Liquidity provision	Debt guarantee
UK	Special Liquidity Scheme – £185 billion	Credit Guarantee Scheme – £250 billion
US	Term Securities Lending Facility – $200 billion	Debt Guarantee Program – $ unlimited
Euro-zone		
Belgium	N/A	Stability Programme - Unlimited
France	N/A	Société Française de Refinancement de l'Economie (SFRE): €320 billion
Germany	N/A	Financial Market Stabilisation Fund (Soffin): €400 billion
Ireland	N/A	Credit Institutions (Financial Support) Scheme 2008: € unlimited
Netherlands	N/A	Dutch Credit Guarantee Scheme: €200 billion

1 As of October 2009.

Recapitalisation	Asset insurance / bad-bank	Reviving the securitisation market
Recapitalisations of Lloyds Banking Group and Royal Bank of Scotland – £37 billion. An additional £25.5 billion will be invested in RBS and £5.7 billion (net of underwriting fees) will be invested in Lloyds Banking Group.	Asset Protection Scheme – £282 billion (total assets insured)	Asset-backed Securities Guarantee Scheme – £50 billion
Capital Purchase Program (part of TARP) – $200 billion	Public Private Investment Program – $75 billion to $100 billion to generate $500 billion purchasing power to buy legacy assets; Asset Guarantee Program to insure legacy assets of Citigroup ($306 billion) and Bank of America ($118 billion)	Term Asset-backed Securities Loan Facility – $200 billion
Stability Programme – €16 billion	N/A	N/A
Société de Prise de Participation de l'Etat (SPPE): €40 billion	N/A	N/A
Soffin: €80 billion	Bad bank scheme announced with budget coming from Soffin	N/A
Recapitalisation of Allied Irish Bank and Bank of Ireland; Full nationalisation of Anglo Irish Bank: €8.5 billion	National Asset Management Agency (Nama) set up to buy up to €90 billion of distressed property loans.	N/A
Recapitalisation of ING, Fortis, Aegon, SNS Reaal: €30 billion	Asset insurance scheme for ING and ABN Amro	N/A

International Comparison – Details

Special Liquidity Schemes

- All central banks have long standing facilities that allow banks access to liquidity.
- Only the UK and the US have specially designed schemes to exchange, or swap illiquid assets held by banks for liquid assets.
- The Term Securities Lending Facility in the US is similar to the Special Liquidity Scheme (SLS) in that the US scheme accepts high quality securitised assets in return for US Treasury bills (and other liquid securities).
- The US scheme is a permanent facility. In the UK, the drawdown window for the SLS is now closed.
- Fees for using the US scheme are based on auctions in which participating institutions bid against one another. SLS fees are based on market rates.

Country	Scheme	Date of operations	Exposure	Collateral accepted
UK	Special Liquidity Scheme	22 April 2008 to 30 January 2009	£185 billion	High quality securitised assets (mostly Residential Mortgage-backed Securities)
US	Term Securities Lending Facility	Permanent Facility (The Federal Reserve changed the terms and conditions in March 2008, but the facility is expected to revert to normal operation in February 2010)	$200 billion (maximum amount made available)	Investment grade corporate securities, municipal bonds, securitised assets (Asset-backed Securities, Mortgage-backed Securities)

Instruments swapped	Fees / haircut	Terms
Treasury bills	Margin between three-month LIBOR and the general collateral rate. Collateral provided is subjected to valuation haircuts to mitigate against losses in the event of a default.	Can be rolled over for up to three years
Basket of US Treasury bills, notes, bonds and inflation-indexed securities	Fees are based on competitive bidding, subject to a minimum.	28 days

Credit Guarantee Schemes

- Fees are typically linked to two indicators of creditworthiness – the issuer's credit ratings and/or its Credit Default Swaps premia (although the two are closely related).
- The fees for using Credit Guarantee Scheme in the UK are generally greater than other countries. In the US the maximum fee payable is 100bps.
- Level of disclosure varies between countries – in the US, the Federal Deposit Insurance Corporation provides monthly reports showing the total amount of debt guaranteed (but not individual usage) and fees received. Countries such as the Netherlands, Canada and Australia provide a full list of securities guaranteed on their websites, with details such as the name of issuer, issue date, maturity date, currency etc. In the UK, the website of the Debt Management Office includes a list of issuers of publicly traded debt (accounting for around 15 per cent of the total amount guaranteed).

Country	Amount pledged	Instruments eligible under scheme
UK	£250 billion	Non-complex instruments such as Certificates of Deposit (CDs); Commercial Paper (CP); and senior unsecured bonds and notes.
US	Unlimited under the debt guarantee program (part of Temporary Liquidity Guarantee Program).	Senior unsecured debt (with maturity greater than 30 days).
Euro Area:		
Belgium	Unlimited; but so far only Dexia has exposure (€82 billion as of 21 August 2009).	Inter-bank deposits, commercial paper, CDs, debt instruments, bonds and medium term notes.
France	€320 billion	AAA rated securities
Germany	€400 billion; with €15 billion drawdown capacity for each bank.	New debt instruments issued on or before 31 December 2009.

Fees and other conditions	Term	Disclosure
50bps plus the median 5-year Credit Default Swap spread for the issuer from 8 October 2007 to 7 Oct 2008. Fees ranged from just under 100bps to over 200bps. The Credit Default Swap component was later reduced to the median for the period July 2007 to July 2008.	Three or five years	For publicly traded debt issues, the Debt Management Office website shows the issuer and the debt involved.
50bps for debt with a maturity of 30-180 days, 75bps for 181-364 days, 100bps for 365 days or greater.	Program closed on 31 October 2009, with the guarantee expiring on 31 December 31 2012.	Monthly report, including number of guarantee, debt outstanding, fees received, debt profile and term at issuance.
Dexia: 50bps if less than 12 months; 50bps + 5-year Credit Default Swap spread from 1 January 2007 to 31 August 2008	Borrowings maturing before 31 October 2011	Dexia press releases.
Dexia: 50bps if less than 12 months; 50bps + 5-year Credit Default Swap spread from 1 January 2007 to 31 August 2008.	Debt must be issued no later than 31 December 2009. Maximum maturity is five years.	N/A
0.5 per cent on undrawn facility + 0.5 per cent (< 12 months) or 0.948 per cent (>12 months). For HRE: 0.1 per cent undrawn charges + 1.5 per cent fee.	Maximum term 36 months	Individual banks' websites.

Credit Guarantee Schemes *continued*

Country	Amount pledged	Instruments eligible under scheme
Ireland	Unlimited.	Inter-bank deposits, senior unsecured debt, covered bonds and dated subordinated debt (lower Tier 2).
Netherlands	€200 billion	Non-complex senior unsecured loans, commercial paper, Certificates of Deposit, medium term notes.
Australia	Unlimited	Non-complex bonds, notes, debentures, bank bills, CDs.
Canada	Unlimited; but for each eligible institution, the maximum amount of insurance available will be max (125 per cent of contractual maturities of wholesale debt instruments during 6-month period from November 1, 2008, 20 per cent of deposits as of October 1, 2008).	Newly issued senior unsecured marketable wholesale debt instruments.

Fees and other conditions	Term	Disclosure
Fee is based on the estimated increased funding costs for the Exchequer from the provision of the guarantee, estimated to be €1 billion over the two-year period (or 15 to 30 bps increases in funding cost). Distribution of fee for each bank is based on long-term credit ratings.	Guarantee expires on 29 September 2010.	Individual bank's press releases.
If less than one year, fee is 50bps. If longer than one year, fee is 50bps plus median Credit Default Swap spread between 1 January 2007 and 31 August 2008. Other conditions include additional requirements on corporate governance with respect to bonuses and resignation premiums.	Maturities ranging from 3 to 36 months. Final application date is 31 December 2009.	Name of institution, guarantee amount, maturity, ISIN and date guarantee listed on DSTA.NL website.
Dependent on issuer's credit ratings • AAA to AA- : 70bps; • A+ to A- : 100bps; • BBB+ or below: 150bps.	Up to five years	Full list of outstanding guaranteed liabilities, including institution name, date granted, liability class, currency; as well as total usage over time.
110bps, with a surcharge of 25bps for eligible institutions with credit rating below A-; further surcharge of 20bps for non-CAD debt. Note: the base fee has been revised down from 135bps.	Up to three years from issue date.	List from Bank of Canada, including issuer name, ISIN, issue date, maturity date, aggregate face amount, currency etc.

Recapitalisation

- Twelve per cent dividend on the preference shares issued by RBS and Lloyds Banking Group is high compared to other countries.
- In the US, dividend is only five per cent in the first five years, then rising to nine per cent.
- In Europe the dividend rate is generally below 10 per cent, with the exception of UBS in Switzerland, where the coupon is 12.5 per cent.

Country	Amount	Injection instruments
UK	£37 billion in October 2008; further £5.7 billion (net of underwriting fee) in Lloyds Banking Group in November 2009, and £25.5 billion in RBS as part of the finalisation of the Asset Protection Scheme. A further £8 billion may be made available to RBS in exceptional circumstances.	Both preference and ordinary shares
US	Capital Purchase Program under TARP – $204 billion invested; received repayment of $70 billion; net investment as of 9 September 2009 was $134 billion	Preference shares and warrants (to purchase common shares)
Euro Area		
Belgium	€16 billion: Dexia (€2 billion), Fortis (€9.4 billion), KBC (€3.5 billion), and Ethias (€1.5 billion)	Core Tier 1 Securities
France	€40 billion, including €5.1 billion in BNP Paribas	Non-voting shares
Germany	Total of €80 billion, with the maximum amount of recap in a single entity amounts to €10 billion.	Core Tier 1 Securities

Fees / dividends	Other conditions
Twelve per cent coupon on preference shares, which were later redeemed (RBS: swapped to ordinary shares; LBG: paid back).	Lending commitment, replaced by more specific conditions in APS.
Five per cent coupon in first five years, rising to nine per cent thereafter.	–
Dexia, Fortis, Ethias – N/A; for KBC – max of €2.51 billion (8.5 per cent interest) or 105 per cent of ordinary dividend for 2008, 110 per cent for 2009 and 115 per cent for 2010 onwards. Zero if no dividend is paid on ordinary shares.	N/A
BNP Paribas no dividend is to be paid if no dividend is paid to ordinary shares; 105 per cent of ordinary share dividend based on 2009 earnings, 110 per cent in 2010, 115 per cent from 2011 to 2017, 125 per cent from 2018 onwards, subject to a cap and a floor set as yields based on the issue price. floor: fixed rate of 7.65 per cent for 2009 pro rata temporis (ie €1.6 per share), then increased by an incremental 25bp for each year until 2014, so that the fixed rate will be brought to 8.90 per cent from 2014 onwards; cap: fixed rate of 14.80 per cent, ie €4.1 per share. Can be redeemed at any time based on pre-determined price – at 100 per cent of face value until June 2010, rising to 110 per cent over time.	BNP Paribas: committed to growing its loan book by 4 per cent in 2009; not granting any stock options to corporate officer in 2009 and 2010; not buying back shares as long as non-voting shares held by the State.
Aareal Bank, Commerzbank: 9 per cent coupon. Can be redeemed at par with BaFin approval.	N/A

Recapitalisation *continued*

Country	Amount	Injection instruments
Ireland	€8.5 billion (€1.5 billion in December 2008 invested in Anglo Irish – but it has since been nationalised and delisted; €3.5 billion Allied Irish; and €3.5 billion Bank of Ireland).	Core Tier 1 non-cumulative preference shares, warrants.
Netherlands	€31 billion: €10 billion for ING, €16.8 billion for Fortis, AEGON €3 billion, SNS Reaal €750 million	Core Tier 1 Securities
Switzerland	Swiss Francs 6 billion – UBS The government of Switzerland has announced its intention to exercise its right to convert all mandatory convertible notes into ordinary share and place those shares to institutional investors.	Mandatory convertible notes (convertible bonds which the holder must convert into common shares at a pre-determined price at or before maturity).

Fee / dividends	Other conditions
8 per cent coupon (10 per cent for Anglo Irish) on preference shares. Banks can redeem at par in first five years, then at 125 per cent thereafter.	Lending commitment to small and medium-sized enterprises, first time buyers; assisting householders in arrears, applying new code of practice for business lending; improving environment, educating consumers and improving communication to customer.
The rate of return on the securities shall be the maximum of: 8.5 per cent, or 110 per cent of the 2009 dividends, 120 per cent of the 2010 dividends and 125 per cent of the dividends on any year starting 2011. This coupon will be payable if dividends are awarded over the preceding year. Company can redeem government securities at 150 per cent of issue price or convert them into ordinary shares after three years.	Government has the right to nominate two supervisory board members, veto important decisions on mergers and acquisitions, capital requirements and remuneration.
Coupon on mandatory convertible notes is 12.5 per cent.	N/A

Asset Protection Scheme

- Many countries have gone down the route of 'bad bank' by pledging a certain amount to purchase bad assets from banks. The US announced the 'Public-Private Investment Program' to help finance the purchase of legacy assets and loans from banks.
- Under the Asset Guarantee Program, the US Treasury has agreed with Citigroup ($306 billion) and Bank of America ($118 billion) an asset insurance scheme.
- The Netherlands announced an asset insurance scheme with ABN Amro. It has also agreed with ING a profit/loss sharing deal on its legacy assets.
- Ireland is establishing a National Asset Management Agency to buy up to €90 billion of distressed property loans.

Asset-backed Securities Guarantee Scheme (ABSGS)

- The closest comparison is the Term Asset-Backed Securities Loan Facility (TALF) in the US. Both TALF and ABSGS were designed to revive the securitisation market.
- TALF was specifically designed to lend money to large investors to buy newly issued ABS, with the buyer facing limited exposure to its credit risks. Greater demand for ABS would increase credit availability and support economic activity.
- The main difference between TALF and ABSGS is that TALF helps stimulating demand for ABS while ABSGS guarantees the quality of the supply of ABS.
- Amounts pledged under TALF is $200 billion (vs. £50 billion in ABSGS in the UK).
- UK scheme not used to date.

Appendix Ten

Methodology

This appendix describes the scope of our study and the research methods that we adopted to conduct our review.

Study Scope

The report is a review of the measures implemented or supported by the Treasury to support the financial stability of the UK's banking system. This report provides Parliament with an explanation of the measures taken since the nationalisation of Northern Rock, the role of the Treasury in designing and implementing the measures, and the nature of the costs, risks and liabilities falling on the taxpayer. We have not attempted to evaluate the value for money of the implemented measures because too little time has elapsed to form conclusive views about their success, either individually or collectively. This report does not consider:

- the causes of the credit crisis or the regulatory regime operated by the Financial Services Authority, which at present are outside our statutory audit responsibilities and have been examined by others;
- the Bank of England's role in respect of monetary policy and stability of the financial system, which are also outside our statutory audit responsibilities;
- support from the Department for Business, Innovation and Skills to non-financial companies; and
- the Asset Protection Scheme, which was being negotiated during our fieldwork.

We developed a framework to structure our investigations that was based around the three following issues:

- why public support to the UK's banking system was necessary;
- the Treasury's oversight of the support measures; and
- the impacts of the support measures and their expected cost.

Methodology

We conducted our investigations using the following research methods:

- literature review;
- file and document review;
- semi-structured interviews; and
- numerical analysis of data relating to the UK's banking industry, the performance of the UK's economy and the support measures.

Literature Review

While UK's banking system had not suffered a major crisis for many decades, numerous nations, both developing and developed, have experienced a serious banking crisis that undermined their financial stability. To acquire knowledge of the how these crises were tackled and the efficacy of the support measures to resolve them, the study team reviewed literature and reports produced by the International Monetary Fund, the World Bank, the Bank of England, and academics.

There has already been a substantial amount of material published about the current financial crisis and on the steps that the Government and others should consider if this type of crisis is to be avoided in the future. Members of the study team kept themselves informed of developments, with an emphasis of reviewing material from the Treasury, Financial Services Authority, the Bank of England and the House of Commons' Treasury Committee.

Specific papers reviewed by the study team are listed at the end of this appendix.

File and document review

We have reviewed a range of external documentary evidence, including:

- The Treasury was unable to provide us with direct access to a complete set of files because information was stored within filing systems of individual teams and had not been collected centrally. We therefore reviewed high level policy submissions, and then posed detailed questions to which the Treasury responded with: copies of email exchanges between Treasury officials; meeting notes; and correspondence with the Financial Services Authority and the Bank of England.
- Key documents setting out the relationships, roles and responsibilities of the Treasury and the Debt Management Office for administering the Credit Guarantee Scheme.
- Reports and press releases from the major UK banks. We used these documents to obtain information about: the ratio of equity capital to liabilities within the banks; the total amount of equity capital in the banks; and details of the merger between Lloyds TSB and HBOS.

- State aid papers produced by the European Commission provided detailed descriptions of the UK Government's interventions and the Commission's views about their acceptability. We used state aid papers relating to interventions made by other member states to help populate our table of the measures to support banking systems that were adopted in other major economies.
- To supplement the material that we obtained from the European Commission, we obtained additional material describing interventions in other major economies from websites of the relevant ministries or public sector bodies.

Semi-structured interviews

We used the literature and files available as the principal source of evidence, but found that we did not have a complete picture of events. To fill gaps in our knowledge we interviewed senior Treasury officials within the Financial Stability Unit, a member of the Treasury's internal legal team who had worked closely with the unit, and a secondee from Ernst & Young who was helping the Treasury improve its knowledge management capabilities.

Recognising that the Treasury did not work alone in developing the support measures, we interviewed key officials from the Bank of England and the Financial Services Authority to ensure that we accurately captured the extent of their input.

We also interviewed a number of independent third parties with a major interest in the UK's banking system including the Confederation of British Industry, the Council of Mortgage Lenders and the British Bankers' Association.

Numerical Analysis

We conducted a number of our own numerical analyses.

- We used information in the Bank of England's statistical database to extract the quantity and price (over the Bank rate) of lending to business and individuals before and during the financial crisis.
- We obtained share prices for UK banks and the FTSE 100 index and compared relative changes in value between the banks that were recapitalised with public money and the index.
- We obtained from Markit data about five-year Credit Default Swaps for UK banks. We reproduced this data to indicate changes in investor's perception of the creditworthiness and probability of defaults by UK banks.
- We compared the British Bankers' Association's LIBOR data with the Bank of England's bank rate to show the extent of the increase in the cost to banks of raising funds in the wholesale funding markets.

- We used UKFI's market investment and annual report and accounts 2008-09, together with the Treasury's annual report and accounts 2008-09 to analyse the number of ordinary shares held in RBS and Lloyds Banking Group. We looked both at the time of the initial recapitalisation and after redemption of the preference shares. We obtained an average subscription price and calculated unrealised profit/loss based on different share price scenarios.

Expert Review

We commissioned Promontory Financial Group to conduct an expert review of the draft report.

Papers reviewed by the study team:

Bank of England (July 2009), *Asset Purchase Facility, Quarterly Report 2009 Q2*

Bank of England (October 2008), *Credit Conditions Survey, Survey results 2008 Q3*

Bank of England (January 2009), *Credit Conditions Survey, Survey results 2008 Q4*

Bank of England (April 2009), *Credit Conditions Survey, Survey results 2009 Q1*

Bank of England (July 2009), *Credit Conditions Survey, Survey results 2009 Q2*

Bank of England (April 2007), *Financial Stability Report,* Issue 21

Bank of England (October 2008), *Financial Stability Report,* Issue 24

Bank of England (April 2009), *Financial Stability Report,* Issue 25

Bank of England (May 2009), *Inflation Report*

Bank of England (August 2009), *Inflation Report*

Bank of England (2009), *Trends in Lending*, monthly editions for period April to September 2009 inclusive

Barrell R., T. Fic and D. Holland (January 2009), *Evaluating Policy Reactions to the Financial Crisis,* National Institute Economic Review No. 207

Bean, C. (October 2009), *Quantitative Easing: An Interim Report,* speech to the London Society of Chartered Accountants

Blanchflower, D. (March 2009), *The Future of Monetary Policy,* Open lecture at Cardiff University

Duttagupta, R. and P. Cashin (April 2008), *The Anatomy of Banking Crises,* International Monetary Fund working paper WP/08/93

Dziobek, C. and C. Pazarbaşioğlu (December 1997), *Lessons from Systemic Banking Restructuring: A Survey of 24 Countries,* International Monetary Fund working paper WP/97/161

Haldane, A. (April 2009), *Rethinking the Financial Network*, speech delivered at the Financial Student Association, Amsterdam

HM Treasury (February 2009), *UK Asset Protection Scheme*

HM Treasury (April 2009), *Budget 2009: Building Britain's future*

HM Treasury (May 2009), *UK international financial services – the future: A report from UK based financial services leaders to the Government*

HM Treasury (July 2009), *Reforming Financial Markets*

Hoggarth, G. and J. Reidhill (December 2003), *Resolution of banking crises: a review*, Financial Stability Review, Issue 15, Bank of England

Honohan, P. and D. Klingebiel (September 2000) *Controlling the Fiscal Costs of Banking Crises*, Policy Research Working Paper 2441, The World Bank

Honohan P., L. Laeven et al (2005), *Systemic Financial Crises: Containment and Resolution,* Cambridge University Press

House of Commons' Library (April 2009), *The Financial crisis in the US: key events, causes and responses,* Research Paper 09/34

House of Commons' Treasury Committee (May 2009), *Banking Crisis: dealing with the failure of the UK banks*, Seventh Report of Session 2008–09

House of Commons' Treasury Committee (May 2009), *Banking Crisis: reforming corporate governance and pay in the City,* Ninth Report of Session 2008–09

International Monetary Fund (March 2002), *The State of Public Finances: Outlook and Medium-Term Policies After the 2008 Crisis*, Companion Paper

International Monetary Fund (August 2002), *Sweden: Financial Stability Assessment*, Country Report No. 02/161

Laeven, L. and F. Valencia (November 2008), S*ystemic Banking Crises: A New Database,* International Monetary Fund working paper WP/08/224

Loutskina E. and P. Strahan (April 2009), *Securitization and the Declining Impact of Bank Finance on Loan Supply: Evidence from Mortgage Originations*, The Journal of Finance, Vol. LXIV, No. 2

Monetary Policy Committee, The (May 1999), *The transmission mechanism of monetary policy*, Bank of England

National Audit Office (November 2008), *Audit of Assumptions for the 2008 Pre-Budget Report*

National Audit Office (March 2009), *HM Treasury: The nationalisation of Northern Rock*

National Audit Office (April 2009), *Audit of Assumptions for Budget 2009*

National Audit Office (October 2008), *Performance of HM Treasury 2008-09*, briefing for Treasury Select Committee

Reinhart C. and K. Rogoff (December 2008) *Banking Crises: An Equal Opportunity Menace*

Reinhart C. and K. Rogoff (December 2008) *The Aftermath of Financial Crises*

Taylor J. (November 2008), *The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong*

Tucker, P. (April 2008), *Money and credit: banking and the macroeconomy,* Quarterly Bulletin 2008 Q1, Bank of England

Turner, A. (March 2009), *The Turner Review: A regulatory response to the global banking crisis,* Financial Services Authority

United States Government Accountability Office (December 2008), *Troubled Asset Relief Program: Additional Actions Needed to Better Ensure Integrity, Accountability, and Transparency,* report to Congressional Committees

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

World Bank, The (December 2008), *Lessons from World Bank Group Responses to Past Financial Crises*, Independent Evaluation Group

Specific statutes that the study team referred to included:

Banking (Special Provisions) Act 2008

Banking Act 2009.

Appendix Eleven

Restrictions on remuneration and changes in corporate governance

Restrictions on remuneration of board members and senior bank executives

To participate in the Recapitalisation Scheme, the Treasury required RBS and Lloyds Banking Group to review remuneration for board members. Both banks agreed not to pay cash bonuses to board members for 2008 and to review the link between incentive schemes and long-term value creation to restrict the potential for 'rewards for failure'.

Specific commitments related to remuneration for performance during the financial year 2008-09. RBS announced, for example a new approach to remuneration which included no discretionary cash bonuses to be paid in 2009. Lloyds Banking Group also agreed not to pay any discretionary bonuses in 2009 except to more junior staff and not to make any free share awards to anyone in the bank.

In August 2009, the Financial Services Authority introduced a new code of practice on remuneration policies across the banking sector, which comes into force on 1 January 2010. Its objective is to sustain market confidence and promote financial stability through removing incentives for inappropriate risk taking by banks.

The largest UK banks and a group of large foreign banks have confirmed to the Treasury that they intend to comply with the code of practice and a set of principles, together with implementation standards on remuneration agreed by the G20 group of nations. A substantial proportion of bonuses (two-thirds for larger amounts) will be deferred for over three years and arrangements will be introduced to claw-back these bonuses if subsequent performance is poor.

Changes in corporate governance

Under the Recapitalisation Scheme, UKFI has specific rights to work with the boards of RBS and Lloyds Banking Group on senior appointments and has done so. However although the non-executive directors are appointed with the agreement of UKFI, under UK company law, directors cannot represent individual shareholders' interests, so they are not UKFI's representatives and will not report directly to UKFI.

In February 2009, the Government commissioned a review of the corporate governance of UK banks[2]. The initial report of the review proposed changes in a number of areas: board composition, in particular through an enhanced role for non-executive directors; risk management; remuneration; and shareholder engagement. The final recommendations were published on 26 November 2009.

2 Walker, D. (July 2009), *A review of corporate governance in UK banks and other financial industry entities (the report containing final recommendations was published on 26 November 2009)*