

8. Government and the financial sector

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Summary

- The financial crisis has forced governments in the UK and elsewhere to intervene in the financial sector in a way that had long been unthinkable.
- The scale of the intervention in the UK is enormous, but the long-term costs to taxpayers could well be small – they may even make a profit. That said, the downside risks are huge because the payoffs on the support measures are asymmetric: taxpayers are much more likely to make big losses than big profits.
- If the government forces the banks to lend on a scale and at interest rates more generous than they would have chosen for themselves, this could increase the direct cost to taxpayers. But if it does not force the banks to do so, the cost in lost tax revenue of deepening or extending the credit crunch could be greater.
- Three reforms could help stop the current difficulties reoccurring. First, reintroducing housing costs into the measure of inflation targeted by the Bank of England might provide limited protection against housing bubbles. Second, capital adequacy requirements need to be higher in the long term and counter-cyclical. Third, better incentives are needed to promote responsible lending and borrowing.

8.1 Introduction

Failures of financial firms and the effective closure of some financial markets – thanks to crises of confidence – have required governments across the world to play a role in the financial sector that all but the most interventionist would have balked at 18 months ago.

As banks have become more fearful of lending to other banks, central banks have massively expanded their balance sheets by stepping in to intermediate flows between financial institutions. As losses among banks have risen – and as the fear of further losses remains – governments have orchestrated recapitalisation schemes that in many countries have left them as major shareholders in the banking sector. As uncertainty and pessimism about the quality of bank assets have increased, sources of funding have dried up and governments have guaranteed new issues of wholesale funds. Deposit protection – in effect, government guarantees of retail deposits – has also been increased.¹ The scale of the support measures and interventions in the UK has been very large. But whether and when they may give rise to a significant net cost to taxpayers is far from clear.

¹ In the UK, deposit protection is provided by the Financial Services Compensation Scheme. Up to a limit, the payouts that are made by the scheme are retrieved by levies upon financial firms. But those limits are not large relative to the scale of deposits covered. If the scheme were to make payouts on a significant proportion of the deposits of a large bank, the gap between payouts and the maximum that could be levied on financial firms would need to come from the state; whether such state support could ultimately be recouped from financial firms is unclear.

This chapter outlines the causes of the problems (Section 8.2), describes the scale of support to the financial sector, the terms on which it has been given and whether it is likely to generate a net cost to the taxpayer (Section 8.3) and looks at ways in which policymakers can help prevent it all happening again (Section 8.4).

8.2 The causes of the problems

In retrospect, what got us into this mess is becoming clearer. In a single (albeit long) sentence: There was too much extension of risky credit at terms which did not adequately compensate for that risk by institutions that did not have enough capital and which relied upon wholesale sources of funding that proved footloose, generating severe liquidity problems once worries about asset quality increased. It is much easier to observe this now it has happened than it was to anticipate it in advance: few saw things clearly until the risks had actually crystallised.

Part of the problem has been that some providers of the debt that ultimately financed lending had a poor idea of the underlying risks of loans; some may have relied too heavily on rating agencies to give a reliable guide to the risk of debt securities backed by lending. Many of those who financed lending may have understood the risks much better, but in a search for yield in a world where returns on debt (particularly government debt) had fallen, they decided to accept more risks – and on less favourable terms – than they had done before.

Perhaps a more powerful factor was that rises in asset prices – especially house prices – seemed to make the underlying loans secure because they generated rising collateral. This convinced many that even if the ability of borrowers to service the debt was questionable, loan losses would be small. Relatively low capital adequacy weights on mortgages reinforced the view that they were at the safe end of the risk spectrum.

Much of the lending that caused problems was residential mortgages, and much of it was made in the US. But the problems have now affected most countries, and losses on lending are rising in many economies.

Problems became clear earliest in the US, where house prices began to fall ahead of most other countries. Underwriting standards in parts of the mortgage market seem to have been remarkably lax – indeed almost non-existent in parts of the sub-prime market in the US. Fraud may have been rife in parts of that market. Richard Bitner, who ran a sub-prime mortgage company in the US, estimates that at the peak of the boom, around 70% of the mortgage applications that came his way were fraudulent.²

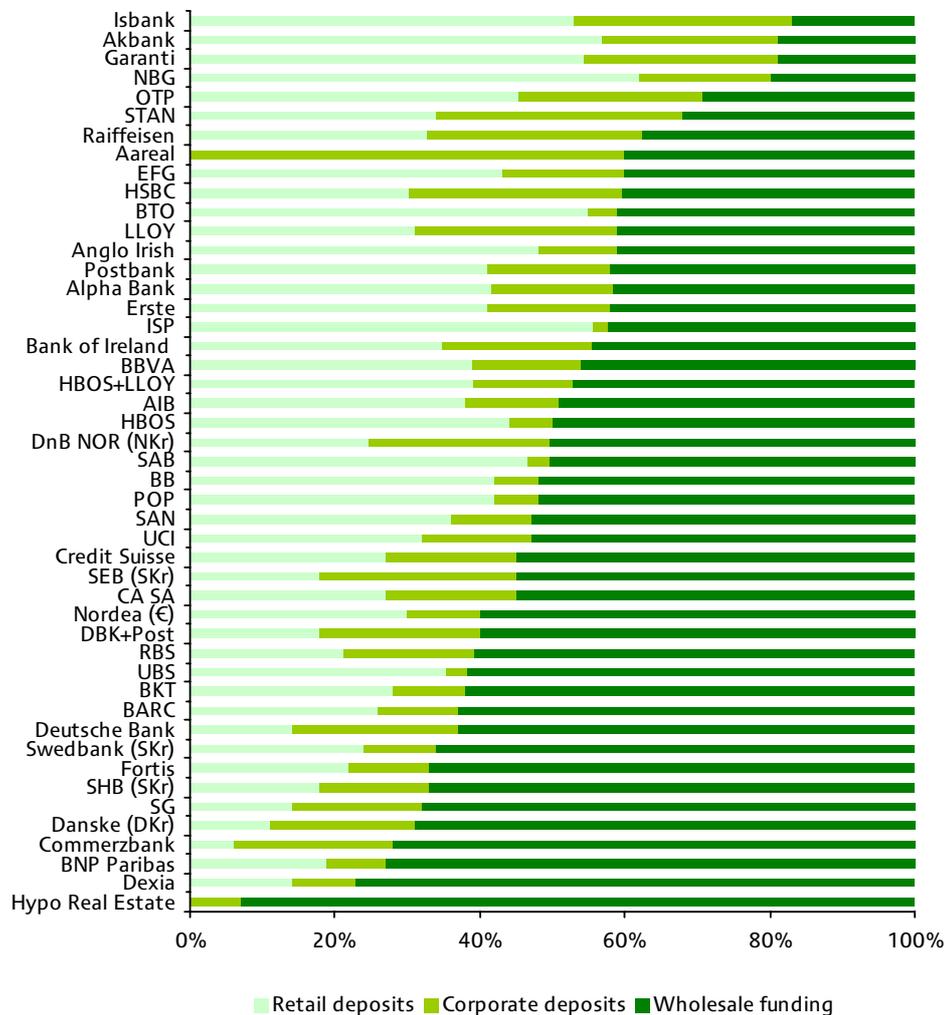
The scale of losses made on lending in the US turned out to be much greater than people had thought likely before house prices started to fall. Because it was hard to judge where the ultimate losses on those loans lay – though clearly they were spread widely among financial institutions across the globe – it triggered a global lack of faith in banks. As asset prices (particularly of houses) fell in other countries, fears about the scale of losses from lending there – and the ability of banks to withstand them – rose. Those fears may have become excessive, but they also had the potential to become self-fulfilling as banks'

² See R. Bitner, *Confessions of a Sub-Prime Lender – An Insider's Tale of Greed, Fraud and Ignorance*, John Wiley and Sons, 2008.

distrust of each other made the flow of credit between them ('wholesale funding') dry up, with knock-on effects for the cost and availability of credit in the wider economy.

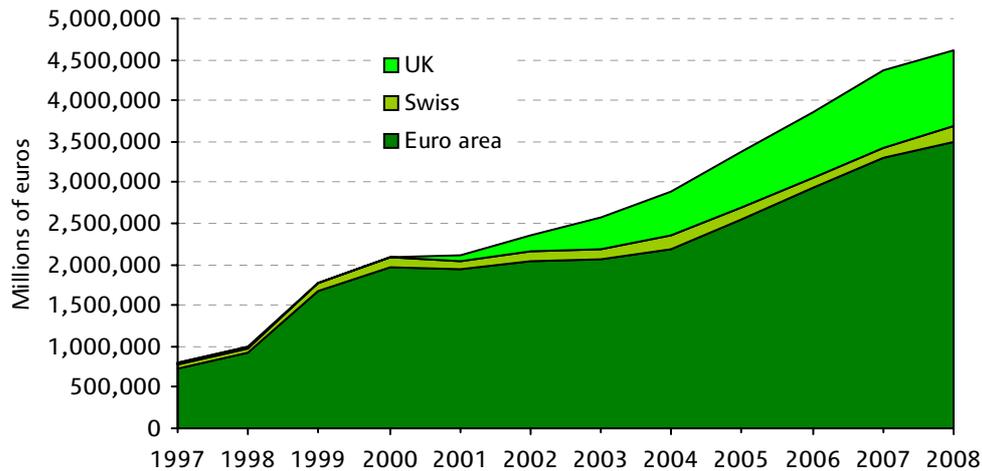
Figures 8.1 and 8.2 show why freezing-up of wholesale funding was a problem. Banks right across Europe depend substantially upon wholesale funding – this is not specifically a UK phenomenon. (The UK banks in Figure 8.1 – Lloyds and HBOS (LLOY, HBOS), HSBC, Standard Chartered (STAN), Barclays (BARC) – are not all clustered at one of end of the spectrum.) One reflection of this is the enormous growth in the scale of bank loans relative to the growth in retail deposits. In 2000, UK banks took roughly as much in deposits as they loaned, but by 2008 that funding gap had risen to over €900 billion. This gap largely reflects reliance on wholesale debt. It is a gap that has also risen enormously within the euro area. So, once the wholesale market became difficult for banks to tap, it created problems throughout Europe. As a result, the ECB has increased the size of its balance sheet enormously, as has the Bank of England.

Figure 8.1. The sources of bank debt across Europe



Source: Morgan Stanley.

Figure 8.2. The gap between bank loans and deposits across Europe



Source: Morgan Stanley estimates.

Erosion in the value of assets (e.g. loans or asset-backed securities) causes problems because debt leverage is high. High debt leverage means that total bank assets are many times larger than equity – often 30 to 50 times greater than the value of tangible equity. Because of the high ratio between equity capital and total bank assets, it takes only a 1–2% fall in asset values to wipe out a substantial proportion of a bank’s capital.

8.3 Government support for the financial sector

Support to the financial sector has come in several forms and generates different kinds of exposures for the UK public sector:

- **Support measures:** The Bank of England has extended its balance sheet by lending, and undertaking asset swaps, against a wider range of collateral than usual; there is also a new asset purchase facility under which the Bank will be authorised by the Treasury to purchase private sector assets.
- **Deposit protection:** The Financial Services Compensation Scheme (FSCS) has been made significantly more generous.
- **Guarantees:** The government has guaranteed some forms of bank debt – both unsecured debt and issuance of asset-backed securities; it has also announced its intention to offer capital and asset protection to banks on assets most affected by the financial market problems.
- **Bank recapitalisation and nationalisation:** The government has taken substantial equity stakes in both RBS and the new Lloyds Banking Group, and has nationalised Northern Rock and Bradford & Bingley.

How big are these interventions? And will they leave the taxpayer with a long-term cost to shoulder? Not all the details of the interventions are yet available. But based on what we know, we set out to answer these questions for the four interventions in turn.

Support measures

The Bank of England has enormously expanded its provision of liquidity, as evident from the growth in its balance sheet (see Table 8.1). At the start of December 2007, the Bank of England's balance sheet – which had already grown significantly in the wake of the problems that began at the end of July of that year – was under £100 billion (and around 6½% of national income). By December 2008, the balance sheet stood at around £260 billion – around 17% of national income. Furthermore, this expansion does not reflect the operation of the Special Liquidity Scheme (SLS), because collateral swaps do not appear on the balance sheet. The SLS began in April 2008 and was subsequently extended to run into 2009. Under this scheme, banks are able to swap a wide range of collateral (including the highest-ranked tranches of Residential Mortgage-Backed Securities, RMBS) for Treasury bills. The Chancellor has said that this scheme might provide £200 billion of enhanced liquidity.

Table 8.1. Bank of England consolidated balance sheet: December 2007 and December 2008 (£ million)

Liabilities	05/12/07	03/12/08	Assets	05/12/07	03/12/08
Notes in circulation	42,115	44,836			
Reserve balances	21,627	38,637			
Standing facility deposits	-	-	Standing facility assets	-	-
			Other maturity within-maintenance period sterling reverse repos	-	-
Fine-tuning sterling repo	-	4,512	Fine-tuning sterling reverse repo	-	-
One-week sterling	-	65,225	One-week sterling reverse repo	16,419	-
			Longer-term sterling reverse repo	15,000	158,719
			Ways and Means advances to HM Government	13,370	370
Foreign currency public securities issued	4,680	5,397	Bonds and other securities acquired via market transactions	7,917	11,710
Cash ratio deposits	2,936	2,433			
Other liabilities	24,958	98,114	Other assets	43,609	88,355
Total liabilities	96,316	259,154	Total assets	96,315	259,154

Source: Bank of England. (Cells containing dashes indicate zero or negligible items.)

New swaps under this SLS will not be possible after 30 January 2009. But the scheme will remain operational for three years thereafter. Upon its closure, the Bank will extend its Discount Window Facility under which, for an additional fee of 25bp, it will provide long-term liquidity (with maturity up to 1 year, rather than the usual 30 days) against collateral.

The Bank will also set up an asset purchase programme implemented through the establishment of a new fund. This will mean that the Bank is authorised to buy private sector assets – including corporate bonds, commercial paper, syndicated loans and asset-backed securities. The Treasury has authorised initial purchases of up to £50 billion financed by the issue of Treasury bills.

All this means an enormous increase in the exposure of the central bank – and therefore the public sector – to losses from erosion in the value of bank assets.

But most of the exposure comes about as a result of collateralised lending or swaps. For these operations for the Bank of England to suffer losses there needs to be *both* a failure

of the counterparty and also an erosion in the value of the collateral taken that is large enough to wipe out the buffer created when the loan or swap was originally made. That buffer reflects the 'haircuts' – the extra collateral required to be pledged for different types of assets.³

Under the SLS, the collateral is largely made up of asset-backed securities – most of which are likely to be mortgage-backed securities. In its most recent *Financial Stability Report* (October 2008), the Bank of England analysed the likelihood of losses on residential mortgage-backed securities:

If, over the next three years, mortgage arrears were to roughly double from their current levels to 2.8% before steadily falling back ('moderate case'), credit losses on UK prime RMBS would cumulate over time to reach a little over £9.4 billion after 25 years – relative to a current principal outstanding of £193 billion. This loss rate of 4.9% is insufficient to erode fully the A rated tranche. If, instead, arrears were to increase more abruptly over the next three years to 4.4% – a little under three-quarters of the peak seen in the early 1990s – losses would accumulate to just over £12 billion, but even then would erode only a fraction of the AA-rated tranche ... Under these moderate and severe projections for mortgage arrears rates, very high loss severities of around 85% and 65% respectively would be needed for the AAA rated tranche to be affected.

The Bank concluded:

it is difficult to reconcile the outlook for expected credit losses on UK prime RMBS, and hence the likely economic value of those securities, with current implied market values ... Under both moderate and severe projections for UK mortgage arrears, AAA rated UK prime RMBS claims do not experience fundamental credit losses. The economic values of these assets lie significantly above their current market values.

This assessment suggests that the Bank of England believes that it is unlikely that it will sustain significant losses on its collateralised provision of liquidity to UK banks.

The Bank of England Asset Purchase Facility is different, because this is not collateralised lending but outright purchases of assets. Its intention is also rather different because, through outright purchases of commercial paper and corporate bonds, it is a means of directly providing credit to non-financial companies. This programme will come into effect on 2 February 2009.

Deposit protection

At the time of the run on Northern Rock, the government announced that it would fully guarantee the retail deposits of that institution and any other that found itself in the same position. This was a substantial extension of the FSCS, which at that time covered 100% of losses on the first £2,000 and 90% of losses on the next £33,000 of deposits held by UK individuals at each institution covered. Subsequently, the FSCS scheme – which is

³ The securities must generally be rated AAA by two or more of S&P, Fitch and Moody's (as opposed to a rating from one agency under the ECB Repo Facility). Haircuts will be applied within a band of 12–22% for RMBS, covered bonds and credit card ABS. Additional haircuts (5%) will apply for own-name RMBS, covered bonds and credit card ABS, while non-sterling-denominated paper will be penalised by a further 3%.

financed from levies on the financial sector and is run on a pay-as-you-go basis⁴ – has become more generous and now covers 100% of the first £50,000 of losses.

The potential exposure of the government here is substantial:

- First, offering full coverage of retail deposits for an institution in the same situation as Northern Rock would create an exposure from potential losses of depositors who had more than £50,000 at the institution. The immediate prospect of a run such as that which hit Northern Rock affecting a large UK deposit taker is, however, relatively remote. The Bank of England SLS means that a recurrence of the Northern Rock scenario is unlikely, and the likely structure of new liquidity rules (as discussed in Chapter 7) will give banks much greater ability to withstand liquidity shocks.
- Second, and more likely than a repeat of the Northern Rock problem, is the possibility that the FSCS scheme could have to make payouts that exceed the limits for levies upon the financial sector.⁵ The total annual capacity of the scheme is currently £4.03 billion. This is a small figure relative to the scale of total retail deposits in the UK, which is close to £900 billion – most of which is eligible for compensation under the deposit protection scheme. But the £4.03 billion figure is the most the FSCS can levy the industry in any one year. If there were a default, or a series of defaults, that exceeded this amount in any year, the FSCS would not be able to levy any further compensation from the industry in that year. But the FSCS could borrow to pay any excess compensation required, and levy the industry in subsequent years to repay that loan. The government, via the Bank of England, has already made a loan to the FSCS to cover the deposits of Bradford & Bingley.

Guarantees

In October 2008, the government announced a Credit Guarantee Scheme (CGS), which provided to banks – for a fee – government guarantees of their issues of unsecured debt (that is, wholesale funds). The government estimated that participating institutions would issue £250 billion of guaranteed debt. On 14 January 2009, the government announced a scheme to guarantee £20 billion of loans to small and medium-sized companies.⁶ On 19 January 2009, the government also announced a new guarantee scheme for asset-backed securities. This draws on recommendations made by Sir James Crosby,⁷ which were originally focused on the mortgage market. But since the Crosby Report, the focus of government action has shifted towards the provision of credit for non-financial companies. Under this scheme – which will start in April 2009 – the government will provide guarantees to be attached to triple-A-rated asset-backed securities, backed by mortgages and corporate and consumer debt. The Chancellor

⁴ But as part of new measures to accelerate payouts to depositors with a bank that runs into problems, a degree of pre-funding may be introduced.

⁵ The financing operates on the basis that the firms in a subclass (e.g. deposit takers) will pay levies required to meet the compensation claims that arise from defaults in their subclass. Once a subclass reaches its annual threshold for levies to the FSCS, the other subclass (if one is in place) in that broad class will be required to contribute to cover further compensation costs. A final layer of funding was introduced in the form of a general retail pool, through which the other broad classes support any broad class that reaches its overall annual threshold.

⁶ Source: <http://nds.coi.gov.uk/environment/fullDetail.asp?ReleaseID=389537&NewsAreaID=2&NavigatedFromDepartment=True>.

⁷ Source: http://www.hm-treasury.gov.uk/fin_mort_crosby.htm.

announced on 19 January 2009 that the government would auction up to £50 billion of guarantees, initially on new mortgage lending and eventually on other assets. The government has said that it will 'ensure that only transparent structures and high quality assets are eligible'. The scheme will operate subject to approval under the European Community's rules on State Aid.

The government claims that charges for the guarantees offered under the CGS are at commercial rates. The charges are subject to the European Commission's approval under the State Aid rules and were approved on 13 October 2008. Subsequently, the charges were amended, with the effect that for most banks they fell slightly. The current charge is 50bp plus the median credit default swap (CDS) spread of the institution in the year up to July 2008. Table 8.2 illustrates the scale of that annual charge which is levied on the amount of debt guaranteed.

Table 8.2. The cost of UK bank guarantees

Guarantee fees	Median CDS, July 07 – July 08 (bp)	Total cost (bp)
Abbey	54	104
Barclays	60	110
HBOS	72	122
HSBC	47	97
Lloyds	39	89
Nationwide	96	146
RBS	64	114
Standard Chartered	51	101

Source: Morgan Stanley estimates.

It is not entirely straightforward to compare the cost of schemes put in place by different governments. Several countries use a similar rule to the UK scheme: Spain, Sweden, Portugal, Austria and Germany have schemes charging 50bp plus the median five-year CDS rate over the 18 months or so up to the end of Summer 2008 (though in some cases there is a cap on that charge, which could mean that less than the median CDS spread was added to 50bp). The French and US schemes seem to charge less. No scheme appears to make a charge for the guarantee that is higher than the UK's scheme. Further, the UK scheme only allows relatively safe unsecured debt to be guaranteed, which is often not the case elsewhere (the UK only allows vanilla senior product, whereas in some other jurisdictions structured notes, LT2 and covered bonds are included).

So the UK scheme does not appear generous relative to similar schemes run by other European governments. But even if it is fairly priced (so that expected losses are in line with the premium charged), it will generate substantial risk if around £250 billion of debt issues are eventually guaranteed (as the Treasury initially anticipated).

The Asset Protection Scheme announced on 19 January 2009 will also generate risks of substantial losses, even if the premium that is charged is fair in an actuarial sense so that the expected losses are covered by the fees charged. As yet, there is limited indication of the scale of the protection that will be sold. But the nature of the guarantee is clear: it will offer capital protection on assets most affected by the financial crisis; banks will face a residual exposure for around the first 10% of losses so that the government will be offering insurance against more extreme events. The fee is to be paid in cash or stock.

Bank recapitalisation and nationalisation

The government has taken into public ownership Northern Rock (which continues to trade) and Bradford & Bingley (whose deposits have been sold to Abbey-Santander and whose assets are being managed by the government). The value of their assets is around £150 billion.

The government has also become a majority shareholder in Royal Bank of Scotland (RBS) and will be by far the largest shareholder in the new Lloyds Banking Group (the recently merged Lloyds TSB and HBOS). In total, around £37 billion will have been provided to take these stakes. This capital comes in various forms:

- £5 billion of preference shares to RBS and £15 billion of ordinary shares (underwritten at 66p, compared with a trading price of 55p when the shares were taken up); subsequently, the government converted its holding of £5 billion of preference shares into ordinary shares at 31¾p, an 8.5% discount to the RBS closing share price on the eve of the announcement (34.7p).
- £1 billion of preference shares to Lloyds and £4.5 billion of common shares (underwritten at 173p a share, compared with a trading price of 133½p when the offer closed on 9 January).
- £3 billion of preference shares to HBOS and £8.5 billion of common shares (underwritten at 114p a share, compared with a trading price of 79p when the offer closed on 9 January).

The cost of the preferred equity, which has a 12% coupon, is higher than the cost of equity to banks in the US and across most of Europe (see Table 8.3⁸). It also carries with it strict conditions on the payment of dividends.

In all cases, the common equity was underwritten at an 8.5% discount to the then prevailing market price, plus 1½% of fees – terms which were more generous than the market would have offered at that time. Subsequent to the underwriting, share prices fell sharply.

Overall, the prices the UK government has paid for the equity stakes it has taken were not obviously unfavourable to taxpayers, *given market prices at the time the terms were agreed*. And the preference shares – which have been offered by Lloyds-HBOS – pay a coupon that is higher than the return on capital paid to other governments on stakes they have taken in their banks (see Table 8.3). But neither have the terms been clearly favourable to taxpayers, given the price at which equity capital might have been available in the private market.

Whether or not the return ultimately earned on the equity stakes will represent a net cost or gain to taxpayers will depend on how the banks are run, something over which the government as the biggest shareholder has substantial influence. After the conversion of preferred shares to ordinary equity, the government will own around 70% of the shares in RBS; it will own over 40% of the shares of the merged Lloyds-HBOS. Running the institutions on what might be called purely commercial terms might offer taxpayers a better direct return on their stake than if the banks are forced to make loans on subsidised terms or to lend where they might prefer not to. But if running the banks on

⁸ This table is an assessment of the terms of bank recapitalisations based on specific deals rather than on government policy statements about the terms on which capital more generally will be made available.

purely commercial terms were to exacerbate or prolong the credit crunch – thereby weakening the economy – then the benefit in terms of higher dividends and capital returns might well be more than offset by the consequent loss of tax revenues. Similar trade-offs apply to the running of Northern Rock.

Table 8.3. Capital supplied to banks by the UK has been relatively expensive

	Form	Capital treatment	Redemption	Government board representation	Common stock constraints
France	Subordinated hybrid debt - 5-year OAT + ~400bps	Tier 1	After year 5 An earlier redemption is allowed in agreement with the Commission bancaire if the securities are replaced by hybrids of equivalent subordination and nominal value	No	-
Germany ^a	Silent participation Around 9%	Core Tier 1	After year 5 ^b	No	No common dividends to be paid until end of stabilisation measures
Austria	Participation capital (domestic non-voting Core Tier 1) - 8.0%	Core Tier 1	After five years at par Issuer has the right to convert the instruments into common shares (terms to be determined)	No	No
US	Cumulative preference shares - 5% until year 5 - 9% thereafter - Warrants attached (15% of size)	Tier 1	After three years Buyback possible before year 3	No	Three-year restriction on common stock dividend increases and share repurchases
Switzerland	30 months mandatory convertible - 12.5%	Tier 1	N/A	No	-
Netherlands	Non-cumulative Core Tier 1 securities Higher of 8.5% or 110% of common dividend in 2008, 120% in 2009, 125% for 2010 (ING precedent) Conversion into ordinary shares at issuer option after three years	Core Tier 1	Buyback at 150% of issue price at any time ('cap') If converted, the Dutch government can opt for repayment of the securities at 100% in cash ('floor')	Yes, two board members	-
Belgium	Non-cumulative Core Tier 1 securities Higher of 8.5% or 105% of common dividend in 2008, 120% in 2009, 125% for 2010 Conversion into ordinary shares at issuer option after three years	Core Tier 1	Buyback at 150% of issue price at any time; however, State can require buyback to be settled in shares If converted, the Belgium government can opt for repayment of the securities at 100% in cash ('floor'), 115% in year 4 increasing by 5% annually, capped at 150%	Yes, two board members	-
UK	Non-cumulative preference shares - 12% until year 5 - Libor + 7% thereafter	Tier 1	After year 5 Buyback at market price before year 5	Only via common share investment	No common dividends until prefs are redeemed / repurchased

Notes: Details for each country reflect the terms of specific transactions with one or more banks in each country, rather than a stated general policy on the terms at which capital will be provided to banks.

a. Convertible option is less shareholder-friendly as indicated, being similar to the Austrian solution.

b. No confirmed detail as yet, assumed to be standard German silent participation terms.

Sources: Debt Management Office; Morgan Stanley estimates.

The government's stated approach to using the stakes in those banks in which it has become a major shareholder is consistent with giving them a high degree of commercial independence, but has an interventionist tone. This is what the Chancellor has said about the operation of United Kingdom Financial Investments Limited (UKFI), the body established to manage the government's stakes:

UKFI will work to ensure management incentivisation based on long-term value maximisation, which attracts and retains high quality management and which minimises the potential for rewarding failure. UKFI will also oversee the conditions attached to subscribing to the Government's recapitalisation fund, including maintaining, over the next three years, the availability and active marketing of competitively-priced lending to home owners and small businesses at 2007 levels.

The Government will not be a permanent investor in UK financial institutions and will over time seek to dispose of the investments in an orderly way, through sale, redemption, buy-back or other means, in accordance with the UKFI's objectives.

The governance of UKFI will be consistent with the Government's intention to manage its investments on a commercial and arm's-length basis and not intervene in day-to-day management decisions.⁹

Both management remuneration and the pricing and availability of credit will be monitored. The goal of maintaining '... the availability and active marketing of competitively-priced lending to home owners and small businesses at 2007 levels' could clearly conflict with the 'intention to manage its investments on a commercial and arm's-length basis'. It might also conflict with the government's goal 'not [to] be a permanent investor in UK financial institutions and ... over time seek to dispose of the investments in an orderly way'.

The government will also attach conditions – beyond the fees payable – to its provision of protection against losses on assets most affected by the financial crisis. Under the Asset Protection Scheme, there needs to be a commitment from the participating banks to support lending to 'creditworthy' borrowers.

Two points are relevant here. First, the government has taken a stake in the banks because there was a clear market failure – the banking system stopped working in October 2008, and again came under huge stress in mid-January 2009. Given this market failure, it would be strange for the government to insist that it leaves the banks' decisions to be determined by market forces. Second, the justification for making banks lend at terms that they might not themselves choose is that, otherwise, lending might fall precipitously and in a way that collectively hurts banks and the economy. Cutting back lending might be rational for an individual lender, but if followed by most banks it would exacerbate the slowdown and drive down asset values for all banks. That provides some justification for having banks make loans on terms that might seem unfavourable to them so long as they assumed conservative strategies by other banks. The government does not want to describe that as a strategy of having banks make non-commercial loans. Indeed, in setting out the conditions under which it would make guarantees available (for a fee) under its new Asset Protection Scheme, it says that there will need to be: 'a

⁹ Letter from the Chancellor to the Chairman of the Treasury Committee, 3 November 2008 (http://www.hm-treasury.gov.uk/uk_financial_investments_limited.htm).

verifiable commitment agreed between the participating institution and the Treasury to support lending to creditworthy borrowers in a commercial manner'.¹⁰

Summary

It is wholly misleading to add together the various figures that each describe the scale of some element of the support programme for banks and describe the resulting aggregate as the scale of the 'bailout'. Doing so certainly generates a big figure: under the SLS, around £200 billion of collateral swaps may be made; £250 billion of lending may ultimately be covered by the Credit Guarantee Scheme and substantial further sums will be covered by new types of guarantees soon to be introduced; initially, up to £50 billion of assets will be bought by the Bank of England under the Asset Purchase Facility; the equity stake in the banks is £37 billion; in the case of Royal Bank of Scotland, since the government owns close to 70% of its equity, there is an argument for including all its debt liabilities – which exceed annual GDP – as liabilities of the government.

But for all the scale of these various types of potential exposure, the most likely outcome is that the support packages will not ultimately cost the government much:

- Most of the Bank of England support measures are protected by collateral that was judged by the Bank itself (last October) to be underpriced.
- The guarantees under the Credit Guarantee Scheme involve charges somewhat higher than those imposed by most other governments and which have been judged consistent with the EU State Aid rules designed to prevent governments subsidising national banks.
- The preference capital supplied to Lloyds-HBOS pays a coupon that does not look low.
- The terms of the guarantee scheme for asset backed securities (announced on 19 January 2009) are subject to State Aid approval from the European Commission.

But while the most likely outcome might be that the cost to the government of the support measures is relatively small, the exposures are great and the chance of big losses is *much* greater than the chance of big profits. Any such guarantee is a form of insurance that inevitably exposes the insurer to downside risks. How great those risks are will depend on the way in which financial institutions are regulated and on the evolution of asset prices. These issues are addressed in the next section, which considers how policy might be changed to enhance financial stability and help prevent similar financial crises from recurring.

8.4 Stopping it all happening again

How can we stop this happening again? Three things are important:

- the framework for maintaining financial stability;
- the role of capital requirements; and
- monitoring the affordability of debt.

¹⁰ HM Treasury, 'Statement on the government's Asset Protection Scheme', 19 January 2009 (http://www.hm-treasury.gov.uk/press_07_09.htm).

The framework for maintaining financial stability

The overhaul of the macroeconomic and regulatory framework undertaken when Labour came to power brought clarity to the operation of monetary, fiscal and regulatory policy – in terms of who had responsibility for each element and, perhaps to a lesser extent, in terms of tools and objectives. The Bank of England has set interest rates to hit an inflation target; tax and spending decisions have been taken in the context of a set of fiscal rules – though how much weight has been given to the rules is questionable (see Chapter 5); the Financial Services Authority has focused on applying a complicated, and changing, set of rules and principles to a huge and diverse range of institutions.

But along the way, a focus on the threats to overall economic stability from problems in financial markets fell between the cracks. It is obvious that such problems have macroeconomic consequences – as asset prices run up and then deflate, as balance sheets become stretched and then are forced to snap back, and as the overall availability of lending in the economy expands rapidly and then contracts.

Two things are now needed. One is to assess whether existing targets or rules given to members of the tripartite authorities (the Bank of England, the FSA and the Treasury) need to be altered so that policy responds automatically to potential problems. Second, a new specific responsibility to focus on aggregate financial stability is warranted. It is natural that on both fronts the Bank of England will take the lead.

Specifically, more needs to be done to prevent huge run-ups in asset prices – particularly in house prices. To that end, one could argue some element of housing costs should be reintroduced into the measure of inflation targeted by the Monetary Policy Committee at the Bank of England. At the moment, there is no direct link between changes in house prices – which themselves are a driver of the overall cost of housing – and the measure of the level of prices the Bank of England is asked to focus on (the consumer price index, CPI).¹¹ If house prices did affect the measure of inflation – as they should if that measure is to reflect movements in the cost of living of households – then an inflation-targeting central bank will tend to offset sharp rises in house prices by tightening monetary policy. There are huge advantages in setting an inflation target for the central bank; and having more than one target when there is just one lever the central bank can pull (by changing the level of the short-term interest rate) is problematic. By putting a measure of house prices into the consumer price index, one can preserve the clarity of having the central bank focus on inflation while also allowing it to respond, at least to some extent, to sharp rises in house prices in a way that will tend to be stabilising.

But if the weight of house prices on the inflation measure is to reflect only its significance to the cost of living, then it could not be relied upon to trigger interest rate increases sufficient to forestall house-price bubbles. So, while more desirable than not, this would have limited value in enhancing financial stability.

The government has not announced any changes to the inflation measure. But it is taking the steps to give the Bank a statutory objective for financial stability. Here is how it was described by the Chancellor in a letter to the Treasury Committee (in June 2008):

¹¹ The previous measure of inflation that the Bank targeted (RPIX) was affected by house-price inflation. At the time of the switch from the RPIX target to the CPI target at end-2003, the difference between the two measures was substantial. In December 2003, RPIX inflation was above the target level of 2½%. CPI inflation was running at 1¼% – significantly below the new (and lower) target of 2%. Much of that difference was due to the impact of high house-price inflation.

The Bank of England Act 1998 gave the Bank a statutory objective on monetary policy. Although one of the Bank's two core purposes, set out in its Annual report, relates to financial stability, the Bank has never had a statutory objective for financial stability ... the Government now intends to provide a firm foundation for the Bank of England's role in financial stability. This will be achieved by legislating to provide a formal legal responsibility in this area, alongside the Bank's statutory role in monetary policy.

So in the forthcoming banking legislation we will set out a high-level statutory objective for the Bank of England to ensure financial stability ... So we will set out a high-level objective for financial stability in the legislation, and then define it operationally.¹²

Quite how the Bank interprets its new legal responsibility remains to be seen. But it will need tools to help fulfil that responsibility. One of those tools, and one which would be used in conjunction with the FSA, should be capital requirements.

The role of capital requirements

There has been an overwhelming consensus from financial institutions – and also their regulators – that equity capital is expensive, that debt is cheap and that the more capital that is held the less profitable will be the institution. This belief has always been puzzling. A basic piece of finance theory – the Modigliani–Miller theorem – says that it is false. There should be a link between the cost of debt for any institution and the amount of equity it has (and which acts as a cushion between losses to that institution and losses to the providers of debt). Once one takes into account the fact that more equity makes the debt safer – and therefore should make it cheaper – then the apparent extra cost of raising equity is offset by the benefits it brings in terms of a lower cost of debt. Almost without exception, when this argument is put to people who work in the financial sector – including regulators – it has been greeted with some mixture of bemusement and pity at its hopeless naivety.

But when we see financial firms that are perceived (rightly or wrongly) to be under-capitalised having difficulty raising debt and needing to pay a lot for it, then this is a powerful reminder of why the Modigliani–Miller theorem is fundamentally right.

Now it is again clearer that there is a link between the cost – and availability – of debt and the amount of equity capital. Anyone who still firmly believes that equity capital is expensive and debt is cheap – so that minimising the amount of equity capital is the optimal strategy – does not really get this.

But once you do get it, it is liberating. No longer do capital requirements set by regulators become an irksome burden where the goal is to minimise the extent to which they bite. And for regulators it is also liberating. Worrying endlessly that the complex system of weights, devised and refined over many years in various iterations of Basle capital rules, has set capital requirements slightly too high is not sensible. If the cost of having more capital is not great, then the cost of setting capital weights on assets higher than the minimum their risk characteristics might seem to warrant is also not high.

¹² http://www.hm-treasury.gov.uk/fin_chx_selectcommittee.htm.

But in setting higher capital requirements, we also need to ensure that they do not operate in an unhelpful pro-cyclical way – letting capital fall in booms when asset prices and lending are growing and rise in downturns when asset prices are falling. Unfortunately, the current capital adequacy rules – or at least the way they have often been applied – seem to have had this effect¹³ and to that extent have undermined financial stability.

Making capital requirements have a counter-cyclical impact should be a high priority.¹⁴ It would add an extra macro policy tool that is needed as a financial market stabiliser.

Better monitoring of the affordability of debt

The root of the recent banking problems is that too much credit was granted to people who will struggle to repay what they borrowed. There now needs to be a much more serious focus on whether those who take on credit can afford to do so.

The Miles Report (2004) was undertaken as an independent review of the structure of the UK mortgage market for the government in 2003.¹⁵ It focused heavily on the importance of lenders and borrowers understanding and carefully assessing the risks of people not being able to service debt. Interest rates on mortgage debt can fluctuate substantially; people in the UK tend to take on variable-rate debt (thereby subjecting themselves to that interest rate risk) and people borrow a great deal relative to their current income. So, understanding affordability is crucial. To some extent, the system of regulation of mortgage lending in the UK reflected the concerns raised in the Miles Review – there is a responsibility on mortgage advisers to consider affordability, and information needs to be given showing the impact of a 1 percentage point change in the interest rate on a mortgage. But subsequent events have shown that there remain huge shortcomings in understanding and assessing risks to affordability.

We need to get to a situation where there is a strong coincidence of mutual interest between lenders, intermediaries and borrowers in not having credit extended where there are high risks that it cannot be repaid. This is a question both of responsibility and of incentives. Incentives matter a great deal. When intermediaries (which include advisers and brokers as well as lenders who then securitise the loans and no longer hold them on their balance sheets) have incentives to generate new lending, they also need to have incentives to monitor that the lending is sound. That seems obvious. Less frequently said is that borrowers – households – have responsibilities and also need to face good incentives. It would be a disastrous situation if people feel that they are absolved of responsibilities over their debt by the fact that someone else made the loan available.

¹³ As house prices have fallen, some UK banks will see 10–15% growth in risk-weighted assets (and therefore their required capital) from the operation of the Basle II rules.

¹⁴ The FSA statement on its approach to regulation of bank capital (released on 19 January 2009) suggests it is acutely aware of this (http://www.fsa.gov.uk/pages/Library/Communication/Statements/2009/bank_capital_.shtml).

¹⁵ HM Treasury, The UK Mortgage Market: Information, Incentives and Pricing (Interim Report), December 2003; HM Treasury, The UK Mortgage Market: Final Report and Recommendations, March 2004. Both are available for download from http://www.hm-treasury.gov.uk/consult_miles_index.htm.

8.5 Conclusions

The government has taken a huge stake in bank assets – through provision of guarantees; through extension of liquidity support, as well as outright purchases of assets, by the Bank of England; through buying equity stakes; and through nationalisation.

None of this represents a handout provided to banks without, in exchange, claims on cash flows. The support measures may not generate a net cost to the government – indeed, if the economy evolves along the lines of the Treasury forecast, that is quite likely.

But the claims the government has acquired do not create symmetric risks where there is as much chance of very profitable returns as of large losses. Much of the support is in the form of guarantees which, as a form of insurance, create risks of big losses but not of large gains. Taking on these big risks is something the government should not shy away from in the middle of a banking crisis. But this makes it essential to take steps to reduce the chances of such crises happening again.