6 THE NORTHERN ROCK CRISIS

As explained in Chapter 1, the Northern Rock crisis was followed by proposals to change the structure of banking regulation, and at the time of writing this was being translated into actual legislation in the 2008 Banking Reform Act. This study is a contribution to the debate about the upheaval in British banking. But a further account of the antecedents to the crisis, and indeed of the crisis itself, is needed to set the debate properly in context.

UK banks' liquidity in the lightly regulated environment from the mid-1990s

Chapter 3 documented the huge declines in UK banks' cash-to-asset ratios in the second half of the twentieth century; it also noted that from the mid-1990s there was little official concern about how banks organised their second line of defence, the ratio of liquid assets to total assets. Towards the end of the period, liquidity management was made more difficult by untoward developments in the availability of asset types, in which the banks had little say. In the nineteenth century and for nearly all of the twentieth century two types of asset had been staples in the organisation of banks' balance sheets: short-dated claims on the government, especially Treasury bills, and so-called 'eligible bills'.[1] Both assets were very low-risk and, as remarked in Chapter 3, could be readily sold to the Bank of England for cash. As they were certain to trade close to their par value and cost next to nothing to buy or sell, they epitomised the concept of 'liquidity'.

Treasury bills and short-dated government securities ('gilts') were free from default risk simply because they were claims on government, and the relatively short period to redemption limited the susceptibility of their price to yield changes; eligible bills were issued by private sector companies, but their usual initial period to redemption was only three months and their default risk was 'accepted' by two high-quality banking names.[2] (This is the origin of both the term 'accepting houses' and the name of the Anthony Powell novel *The Acceptance World*.[3]) By the middle of the twentieth century the Bank of England had hardly any staff able to assess credit risk, but in transactions in Treasury bills, gilts and eligible bills that did not matter. In addition, a special type of institution – the discount houses – existed as a buffer between the commercial banks and the Bank of England. The discount houses' assets were almost entirely Treasury bills, short-dated gilts and commercial bills, while their liabilities were mostly deposits from banks,

1 Eligible bills were a kind of commercial bill. They were called 'eligible' because they were eligible for sale to (or 'rediscount at') the Bank of England.

2 The Bank of England used to publish a list of banks that could 'accept' commercial bills and so make them eligible for rediscount. A similar system was established in the USA, where two-name bankers' acceptances could be rediscounted at the Federal Reserve. As far as the author is aware, the two-name feature of this paper has meant that it has never defaulted either in the USA or the UK, but he may be wrong.

3 'The Acceptance World was the world in which the essential element – happiness, for example – is drawn, as it were, from an engagement to meet a bill.' Anthony Powell, *The Acceptance World*, Fontana, London, 1983 (originally published in 1955), p. 178.

known as 'money-at-call'.[4] As a result of these arrangements, British banks' liquidity consisted of three assets: appropriate government securities (i.e. Treasury bills and short-dated gilts), eligible bills and money-at-call with the discount houses.

In the closing decades of the twentieth century and opening years of the 21st century the ratio of public debt to national income fell sharply, while insurance companies and pension funds asked the government (or from 1998 its Debt Management Office) to bias new issuance towards the long end. The availability of Treasury bills and short-dated gilts to the banking system declined markedly compared with the situation mid-century. Commercial bills continued to be issued in abundance in the 1980s, but in the 1990s the Treasury and the Bank of England decided to bring the discount market to an end.[5] The discount houses wound down their very liquid assets and their money-at-call liabilities, and transferred their capital to other activities. In 1997 the London Money Market Association, dominated by banks as such, replaced the London Discount Market Association. Further, in 2003 the Bank of England brought the apparatus of bill eligibility to a close, apparently on the grounds that entries for bills in its accounts were now very small and clogged up computer

4 Perhaps the discount market's most important social benefits were, first, that a new bank could easily enter British banking by leaving money-at-call with a discount house, and, second, that the Bank of England could 'inject liquidity into the system' (i.e. credit sums to the discount houses' balances with it), without selecting any particular lending bank as the destination of the funds (in principle discount houses bought bills, but did not themselves initiate loans). Both features were pro-competitive. The point was noted by Goodhart in 'Myths about the lender of last resort role', *International Finance*, 2(3), Blackwell, Oxford, 1999, reprinted as pp. 227–45 in Charles Goodhart and Gerhard Illing, *Financial Crises, Contagion, and the Lender of Last Resort*, Oxford University Press, Oxford, 2002. See, particularly, p. 230.

5 No formal announcement was made.

systems. So by the middle years of the current decade the three traditional forms of UK bank liquidity had largely disappeared.

But one lesson from Chapter 3 cannot be evaded. While commercial banks always need cash to meet deposit withdrawals and for inter-bank settlement, they try to maintain holdings of liquid assets which earn some income as well as being easily convertible into cash. The opening years of the 21st century saw a boom in so-called 'structured finance', in which banking groups bought up baskets of mortgages, hire purchase assets and other streams of receivable cash, and issued debt liabilities against them.[6] The debt liabilities – the ABS, the CDOs and the CMOs mentioned in Chapter 1 – were cut up into tranches of different 'seniority'. The most senior debt tranche would have the first claim on the assets if there were any defaults, a second tranche would have the second claim and a junior (or so-called 'equity') tranche would pick up the residual assets. Given that most people service home mortgages through thick and thin, the most senior debt ought to have been – and usually was – awarded a triple-A rating by the credit rating agencies. A triple-A rating ought to put such paper on the same pedestal, in terms of credit standing, as government securities. In view of the dearth of Treasury bills, the

6 As mentioned in note 2 above, in the traditional system of UK bank liquidity management paper issued by the private sector – i.e. two-name eligible paper – could be and was used extensively in Bank of England open-market operations. The two-name feature was a do-it-yourself form of credit endorsement without any conflicts of interest. (The acceptor took a fee, but was at risk until the bill was repaid.) By contrast, the creditworthiness of the triple-A securities bought by banks in the structured finance boom was judged by credit rating agencies, although these agencies suffered from a severe conflict of interests. (The company to be rated paid the fee.) The case for the revival of bill eligibility was made by the author and Brandon Davies, a former treasurer of Barclays Bank, in 'How to restore liquidity to triple-A securities', *Financial Times*, 17 September 2008.

complete absence of eligible bills and the demise of the discount market, how were UK banks to satisfy their need for liquid assets? It is understandable, even if it turned out to be disastrous, that over the last decade or so they have decided to hold large quantities of the triple-A securities created in the structured finance boom. Such securities were presented in banks' accounts as 'available for sale' and were seen as a substitute for traditional liquid assets.

Were the banks irresponsible in their behaviour? Chapter 3 showed that by the middle of the current decade UK banks had negligible cash holdings and, at least superficially, a perilous degree of maturity transformation in their balance sheets. In their defence banks' managements would have emphasised that they kept deposits at other banks plus the cushion of available-for-sale securities. Inter-bank deposits and available-for-sale securities could be viewed as similar in quality to the money-at-call and bill assets that would have qualified as 'liquid' in the eyes of the Bank of England in the mid-twentieth century. In fact, at the end of June 2007 even the much-criticised Northern Rock had deposits with other banks of £6,812 million and available-for-sale securities of £8,000 million, against a balance sheet total of £113,506 million.[7] So its 'liquid assets', taken altogether, were more than 13 per cent of liabilities (and much more than 13 per cent of retail deposits), not out of line with the norms of the late twentieth century. Furthermore, banks' executives might have noted that they had unused inter-bank 'lines' (i.e. borrowing facilities), which could be drawn if – for any reason – they could not find buyers for their supposedly 'available-for-sale' securities.

One flaw in these arrangements was that, while any individual

7 Northern Rock interim results, published on 25 July 2007 and available on the Northern Rock website, p. 19.

bank could regard an inter-bank line from other banks as enabling it quickly to add to its cash, for all banks together the inter-bank lines cancelled out. If all banks either ceased to trust each other or found that they needed cash for their own businesses, the likelihood was that they would cut their lines to each other. Inter-bank finance would prove illusory as a source of liquidity. Further, if the market in allegedly 'available-for-sale' securities became constipated by excess supply (of, for example, the ABS, CDOs and CMOs which were issued in vast quantities in 2005 and 2006) or were disrupted for some other reason, the only remaining liquid asset would be cash. That ultimate source of cash was the central bank, which in the UK context meant the Bank of England. The Bank of England's attitude towards the various forms of asset-backed paper would therefore be fundamental to banks' own management strategies and decisions.

The Bank of England breaks Bagehot's rule

After the international wholesale banking markets became paralysed on 9 August 2007, a number of British banks approached the Bank of England for an easing of its collateral requirements in repurchase operations. They received a dusty answer. For many years they had run down their cash holdings, taking it for granted that the Bank of England would always help them out as long as they had adequate capital and good-quality assets. This assumption was shattered by the insistence of Mervyn King, the Bank's governor, that only government securities constituted the right kind of collateral for central bank loans.[8] King's insistence was the

8 Alex Brummer, *The Crunch*, Random House, London, 2008, p. 66.

more remarkable in that it had been officialdom's failure to issue short-dated gilts in the previous five years which had been at least partly responsible for the banks' purchases of triple-A mortgage-backed paper. The banks realised that the assets that they deemed available-for-sale, and so as serving the same function as official 'liquid assets' in the past, would not find a willing buyer in the Bank of England.

In *Lombard Street*, Bagehot argued that in emergencies the Bank of England should 'lend ... as fast as' it can, because 'ready lending ... cures panics, and non-lending or niggardly lending ... aggravates them'.[9] King's action undoubtedly contravened the spirit of Bagehot's principles. Moreover, the Bank of England's behaviour was at variance with that of the world's two largest central banks, the Federal Reserve and the European Central Bank. Whereas the Bank of England insisted on government securities as loan collateral and charged 100 basis points above base rate for above-normal use of its borrowing facilities, the Fed and the ECB took a wide range of assets as collateral and deliberately injected large amounts into the money markets (i.e. they credited sums to banks' balances with them). King's approach has subsequently come in for heavy criticism. According to Alex Brummer in his book *The Crunch*, 'when it came to the practical side of banking – the provision of liquidity designed to prevent contagion – King was strangely out of touch'.[10]

Within a few weeks the Bank of England had relented on its collateral rules and adopted a position similar to that of the

9 Walter Bagehot, *Lombard Street*, vol.. IX in Norman St John-Stevas (ed.), *The Collected Works of Walter Bagehot*, The Economist, London, 1978 (originally published in 1873), p. 207.

10 Brummer, op. cit., p. 120.

two larger central banks. However, the damage had been done. British banks realised that their triple-A securities were not as high-quality as their traditional liquid assets. Inter-bank lines were being trimmed all through the spring and early summer of 2007, but the process was now intensified. Further, some banks sold off their triple-A securities in order to take in cash from other banks. These securities therefore fell to beneath their fair value, leading to losses for the banks. Under mark-to-market accounting rules, the banks were required to lower the value of their capital accordingly. This may sound like a technicality, but – for banks operating with a capital-to-assets ratio of 5 per cent – a loss on available-for-sale securities equal to only 1 per cent of assets wiped out 20 per cent of capital. If banks then responded to the cut in capital by restricting new lending, the growth of both bank credit and the quantity of money (which consists of banks' deposits) would suffer. Finally, the banks continued to believe that the great majority of the triple-A securities they held would pay back in full (100 cents in the dollar, 100 pence in the pound, and so on) at redemption. Since the securities were trading at prices well below fair value, the banks still holding triple-A securities decided to cling to them. Instead of being easy to buy and sell, like the Treasury bills, short-dated gilts and eligible bills that had been so prominent in banks' cash management twenty years earlier, in late 2007 many triple-A securities were not being bought or sold at all. With the market image of structured finance products blighted in this way, new issues of such products could no longer be made.

Northern Rock's predicament

For one British bank in particular, the harsher conditions in the inter-bank market and the cessation of structured finance issuance were disastrous. As noted in Chapter 1, the management of this bank – Northern Rock – was in an acute predicament. Because a securitisation issue planned for September could not now go ahead, Northern Rock might be unable to fund its assets. The details of the actions taken in August and September 2007 by the FSA – and indeed by its two partners in the Tripartite Authorities, the Bank of England and the Treasury – are to some degree confidential and may remain so for many years. A good narrative account based on personal interviews has, however, appeared in Alex Brummer's *The Crunch*.

The heart of Northern Rock's problem was that it lacked retail deposits on a sufficient scale from a large branch network: that was why the sudden halt in wholesale funding was so damaging. At the suggestion of Northern Rock's board, the FSA agreed that the American investment bank Merrill Lynch should seek a possible buyer. Merrill Lynch put a senior corporate finance executive, Matthew Greenberg, in charge of the job. He saw that an obvious candidate was Lloyds TSB, since it had both an extensive branch network and only slight involvement in the excesses of structured finance. According to Brummer, by early September Lloyds TSB was ready to go ahead with a bid of £2 a share. But Lloyds TSB's top management had an important reservation. Although their own bank did have a large branch network and was well capitalised, they were concerned that they might have difficulty funding Northern Rock's assets, particularly in 2009. They therefore asked for a Bank of England back-up loan facility of £30 billion, to be provided on commercial terms. These terms were presumably inter-bank or base rate plus a margin, but the details are not in the public domain. It must be emphasised that the facility – like the overdrafts discussed in Chapter 4 – might not have been used at all. Indeed, if the deal had gone ahead, Lloyds TSB would almost certainly have preferred not to draw on it, but to rely instead on retail deposits or other conventional types of funding.

A fair surmise is that – if Lloyds TSB had acquired Northern Rock – the run would not have happened and the Northern Rock fiasco might have been averted. To quote Brummer again, 'The Rock received the distinct impression from its regulator the FSA, its first point of contact [in officialdom], that this was a deal that could be done.'[11] The obstacle was the Bank of England. King was anxious that Lloyds TSB was being unduly favoured by the Tripartite Authorities and that European competition law was being broken. On Monday, 10 September 2007, Northern Rock and Lloyds TSB had almost completed the wording of a press release on a deal. But the next day the Bank of England's deputy governor, Sir John Gieve, phoned Northern Rock's chief executive and said that the £30 billion stand-by facility could not be granted. The deal was stymied. As Northern Rock had been expecting the deal to go ahead, its cash problem became urgent. By Thursday, 13 September, its executives agreed they would have to borrow from the Bank of England, and told FSA and Bank officials that a stock exchange announcement had to be made about a development so fundamental to its business. The announcement was due early on Friday, 14 September. Unfortunately, the Peston leak on the BBC both preceded it and gave a misleading impression of the gravity of Northern Rock's situation. The run followed in short order.

11 Ibid., p. 77.

Some fundamentals of central banking

In early 2007 Northern Rock had been a solvent, profitable and well-regulated bank. The closure of the wholesale money markets in August was a genuine shock which no one had foreseen with any clarity. According to the Bagehot rule, Northern Rock was an appropriate beneficiary of a lender-of-last-resort loan. It did indeed receive such a loan, eventually to top out at nearly £30 billion, in the weeks following 14 September. But the loan was granted virtually under duress, since without it Northern Rock's depositors could not have been repaid with legal-tender banknotes. There is no doubt that the outcome was unintended and embarrassing for officialdom.

In evidence to the Treasury Committee of the House of Commons on 20 September King said that the Bank of England would have liked to act as lender of last resort to Northern Rock in the same way that it had done in the so-called 'small banks crisis' of the early 1990s. In other words, the Bank would have liked the facility to be made covertly in order to minimise the risk of a run. He then referred to four pieces of legislation, two of them arising from the UK's membership of the European Union, as constraining the Bank's freedom to act. (A European Commissioner immediately disputed King's interpretation.[12]) But in fact, as the next few paragraphs will show, King disliked the whole idea of the Bank of England lending to shareholder-owned, profit-seeking banks.

The trouble started at King's mid-August meeting with the banks, where he turned down their request for an easing of collateral rules in repo transactions. That caused tension between the

12 Tim Congdon, *Northern Rock and the European Union*, Global Vision, London, 2008, p. 8.

Bank of England and the banks, and made them more reluctant to operate on the easy-going, give-and-take basis that had marked their relationship over the decades. In the secondary banking crisis of the mid-1970s the Bank of England persuaded the big clearing banks, with their retail funds, to lend to the secondary banks for a few years in the 'lifeboat' rescue.[13] As a result, the secondary banks were able to unwind their loan portfolios in a gradual and orderly way. The problems were largely hidden from public view, losses inside the banking industry were containable and banks' customers were able to convert deposits into notes at all times. The lifeboat operation, largely organised by the then governor, Sir Gordon (now Lord) Richardson, and the deputy governor, Sir Jasper Hollom, is widely regarded as a model of skilful central banking.

But – because of the animosity that arose from the mid-August meeting – it would have been impossible for King to have entered negotiations with the big banks in the same spirit as Richardson and Hollom over thirty years earlier.[14] Even worse was the Bank's interference, at a late and crucial stage, in the discussions between the FSA, Lloyds TSB and Northern Rock. At the senior level, banking supervision in the FSA was largely staffed by former Bank of England officials, many with considerable banking expertise. The FSA was correct to try to arrange a takeover of Northern Rock by a bank with undoubted strength in retail funding. The

13 The secondary banking crisis was also referred to in Chapter 5. See p. 91 above.

14 It is sometimes claimed that the club-like nature of British banking has been ended by the globalisation of finance, so that a lifeboat-type operation could not now be launched. But see p. 124 of Brummer's *The Crunch* for an account of a Sunday afternoon gathering of bankers in 1998, called by Eddie George (the then governor of the Bank of England), to handle the funding problems of Korean banks.

Bank of England loan facility requested by Lloyds TSB may or may not have been used, but it would not have attracted all the media hullabaloo of the loan to Northern Rock. Competition issues were relevant, but, if the Lloyds TSB takeover had been announced, there would have been many weeks for another bidder to emerge and the same Bank of England facility could have been made available to it.[15] Indeed, given officialdom's concern over competition issues in the mooted Lloyds TSB takeover of Northern Rock, it is staggering that such issues were brushed to one side in the much more anti-competitive Lloyds TSB takeover of HBOS in late 2008. The contrast between the state's attitude towards the two deals speaks volumes about the inconsistency verging on chaos in policymaking in this period.

In a speech to the Northern Ireland Chamber of Commerce in October 2007, King argued that Northern Rock had been at fault in not organising sufficient 'liquidity insurance'. What he meant by this was that it had not arranged large enough lines of unused inter-bank credit from big banks to anticipate a cash problem. He compared Northern Rock unfavourably with an American counterpart, Countrywide, which – in his words – on '17 August was able to claim on that insurance and draw down $11.5 billion of committed credit lines'. He alleged that Northern Rock had not taken out 'anything like that level of liquidity insurance'.[16] In its evidence to the Treasury Committee three weeks later Northern Rock refuted King point by point, emphasising that – relative to

15 According to Brummer, the decision not to offer a facility to Lloyds TSB was taken by Alistair Darling on advice from King (*The Crunch*, p. 77). King's views on the implications for competition policy of the Lloyds TSB–HBOS merger agreed in late 2008 are not publicly known.

16 Mervyn King, governor of the Bank of England, speech at the Northern Ireland Chamber of Commerce and Industry, Belfast, 9 October 2007, p. 6.

its balance-sheet totals – Northern Rock had *higher* unused inter-bank lines than Countrywide. Northern Rock's discussion of its own funding strategy also contained a sting in the tail, with the observation that 'Countrywide had the ability to use its mortgage backed notes as collateral to borrow from the US Federal Reserve ... under a general liquidity facility available to all US banks, while Northern Rock was not able to borrow in the UK on the same basis, nor indeed through the ECB as it understands other UK banks with sizeable European operations were able to do'.[17]

King was wrong not just in his accusation against the Northern Rock management. More basically, he seemed not to have understood the purpose of central banking. Part of the trouble lay in differences in vocabulary and the gulf in thinking which these differences reflected. King's chosen phrase in his October 2007 speech, 'liquidity insurance', was a neologism in banking circles. Of course, all banking involves liquidity insurance if someone wants to put it like that. To the extent that banking gives customers an ability to make payments at future dates that they would not otherwise have, it insures them against unforeseen contingencies. So, when a bank extends an overdraft facility, the non-bank borrower can be said to have received 'liquidity insurance' or, when a bank agrees a line in the inter-bank market to another bank, the bank which may need to borrow can be regarded as a kind of policy-holder of 'liquidity insurance'. King's phrase is not, however, one that appears commonly in banking textbooks, or that bankers and their customers have ever favoured. Instead of saying that they pay 'premiums' for 'an

17 'Memorandum from Northern Rock', pp. Ev 231–9, section on 'Funding insurance', in House of Commons Treasury Committee, *The Run on the Rock*, 5th report of the 2007/08 session, The Stationery Office, London, 2008, vol. II.

insurance policy', they talk about 'arrangement' or 'commitment fees' for 'a line', 'a facility' or 'an overdraft'.[18]

But it was not King's choice of words which was the real problem. Banks can promise overdrafts to non-banks and one bank can pledge a line to other banks. In principle the proceeds of the overdraft can be converted into cash and an inter-bank line is available to cover a possible deficiency in a bank's balance at the central bank. But, ultimately, in modern circumstances no profit-seeking and privately owned commercial bank can produce one particular type of asset, legal-tender banknotes or 'cash' in its true sense. A private agent cannot promise to pay in cash unless it either already has the cash or is very certain that it can obtain cash in future; it certainly cannot create cash at nil cost, because that would break the legal tender laws: only one organisation can do so, namely the central bank.

If the entire system is short of cash, the existence of committed inter-bank lines for which arrangement fees have been paid may be no help. There is a high risk that banks will wriggle out of their commitments. When the whole system 'suffers from a lack of liquidity', banks will cancel as many inter-bank lines as possible without breaking contracts, and spreads and arrangement fees will increase. In that case the institution which – uniquely – can restore 'liquidity' is the central bank, since it is the only issuer of

18 The phrase 'liquidity insurance' was used in the Diamond and Dybvig article, cited in note 12 to Chapter 1, which seems to have been a major intellectual influence on King. It also appeared in the first sentence in an article by Graeme Chaplin et al., 'Banking system liquidity: developments and issues', on pp. 93–111 of the December 2000 issue of the Bank of England's *Financial Stability Review*. In the Chaplin article the phrase referred to the help given by banks to non-banks in making payments; in King's Belfast speech it referred to an inter-bank line. The meanings are quite distinct.

legal-tender notes. As far as the banks are concerned, they have a demand for the services of a central bank only because it will provide them with liquidity when they are short of cash. For the governor of a central bank to tell banks that they should provide liquidity insurance to each other, in order to pre-empt a crisis, is rather like a doctor telling a patient to leave the surgery because he should not have got ill in the first place. Either the central bank offers them 'liquidity insurance' to help them in a crisis or it is not a central bank.

Chapter 3 showed that banks could conduct all their usual business functions, including clearing, without a central bank. In the USA, before 1914, banks belonged to private clearing houses and these clearing houses issued liabilities that served as a means of settlement between their members. Such arrangements are inferior to central banking, but they are workable. Admittedly, the suggestion that British banks could withdraw their deposits from the Bank of England and switch their settlement business to a UK-based clearing house (with the clearing account in a large shareholder-owned bank) may sound implausible, even ridiculous, in today's conditions. To abandon settlement across a Bank of England account and instead to clear via a note exchange would certainly be expensive in resource terms. A different kind of exit from the Bank of England's jurisdiction, and from the mass of rules, regulations and controls enforced by the FSA, is, however, already a reality. In the modern world, where exchange controls have been abolished, banks can service large corporate customers from almost any commercial centre and in any currency. If the Bank of England will not provide useful services to British banks, they can relocate at least part of their activities to other countries where the central bank is more cooperative. There is nothing inevitable about the commitment of a certain sum of capital to a so-called 'British bank', obliged to lodge a deposit with the Bank of England, by a particular body of shareholders. The shareholders can up sticks, and move their capital and operations to a better location. This warning – that banks nowadays have a choice between at least three central banks (the US Fed, the ECB and the Bank of England) – was the sting in the tail in Northern Rock's evidence to the Treasury Committee.

No need to pre-fund deposit insurance

The Northern Rock affair was sad and pathetic, as well as unnecessary. It did, however, have an important redeeming feature. Despite the furore of late 2007, Northern Rock's depositors were able either to withdraw cash from their accounts or to switch the money to accounts at other banks. In that sense financial stability was maintained. Whether or not taxpayers eventually lose money because of the Northern Rock rescue is uncertain, but the latest news at the time of writing (November 2008) is fairly reassuring.[19] Until now the British banking system has not pre-funded a deposit insurance fund on a big scale. (It has paid premiums to a deposit insurance fund, but it has not committed a large capital sum.) On the evidence the Northern Rock affair has had one good outcome. This is to show that a large last-resort loan to a solvent bank can by itself protect depositors' interests and that the involvement of a deposit insurance agency, with a back-up fund, is unnecessary.

19 In its published accounts in mid-2008 Northern Rock continued to have positive shareholders' funds, despite a large charge against future bad debts. The bank's relatively good financial position was the more remarkable given that the fall in house prices between August 2007 and June 2008 was the largest in a ten-month period in British history.

But that is not how King saw the matter. Instead, as noted in Chapter 1, he urged that a deposit insurance system must be pre-funded and even described pre-funding as 'natural'. For anyone accustomed to banking, with its creation and cancellation of balances 'by a stroke of the pen', there is nothing whatever natural about the pre-funding of deposit insurance. On the contrary, the great achievement of banking is to have overcome the pot-of-banknotes fallacy and made the pre-funding of contingent future payments unnatural. Indeed, all the financial institutions of the modern world are man-made and artificial, and virtually all of them involve credit. None of them is 'natural', whatever that means, while credit implies the carrying-out of a transaction *before* payment. For King to demand payment *in advance* is to misunderstand what banking is all about.

In any case, it is obvious that, as long as all regulated banks are solvent, both a deposit insurance agency and a deposit insurance fund are superfluous, and pre-funding does not need to be discussed at all. For most of the last century the solvency of British banks has not been in question and deposit insurance has not existed. A deposit insurance fund is needed only when a bank is indeed bust because the lender of last resort facility provides liquidity for solvent banks.

But, even where a bank is bust, pre-funding of deposit insurance is not necessary. Suppose that the bust bank's capital deficiency exhausts the deposit insurance fund. In those circumstances the central bank can extend a loan to the deposit insurance fund, which can then pay out cash to depositors, and the deposit insurance fund can ask the commercial banks for money to repay the loan. Arrangements in which banks offer 'callable capital' in this way are more flexible and cheaper for the banking system than pre-funding. Of course, such arrangements ought to be on a contractual basis agreed well in advance of any crisis, but only an advance contractual commitment – not pre-funding – is necessary.

How is 'moral hazard' relevant?

King has one phrase that he uses repeatedly to justify his criticisms of traditional practices in British banking. The relevance of this phrase 'moral hazard' arises from the supposed danger that banks will choose risky assets if the Bank of England is a soft touch towards last-resort lending, rules on collateral, capital requirements and so on. King is right that the central bank's criteria for lending can affect banks' asset selection, as discussed in the section on loan collateral in Chapter 5. But the notion of 'moral hazard' has usually had a very different application in banking theory. This is the relevance of the deposit insurance system to the amount of care that potential depositors pay to banks' risk profiles. If deposits are fully insured (so that depositors will receive their cash back, come hell or high water), depositors have no incentive to check that banks are choosing safe assets; if deposits are less than fully insured, they have an incentive to monitor banks' asset holdings; and, if deposits are not insured at all, that incentive is very strong since – in the extreme – they could lose all their deposits. It follows that moral hazard in banking, the risk that banks will be reckless in their asset choice and business conduct, *increases* with the comprehensiveness of deposit insurance coverage. The more extensive and generous the deposit insurance given to banks' customers, the more likely it is that banks will select high-risk assets.

This lesson is a commonplace of the large literature on deposit insurance in the USA. Indeed, the history of deposit insurance as an institution says much about its disadvantages. Until the 1930s most banking regulation in the USA was at the state level and large numbers of state-specific deposit insurance funds were established at one time or another. Unfortunately, financial crises were often accompanied by widespread bank failures which exhausted the deposit insurance funds. Deposit insurance therefore had a mediocre reputation in the USA when the Federal Deposit Insurance Corporation was created in 1934.[20] The apparent success of the FDIC over the next 45 years may have been largely due to the high proportion of banks' assets in safe government securities, which reflected both the budget deficits of World War II and tight financial regulation, rather than the intrinsic merits of deposit insurance.

But in the 1970s and 1980s American banks increased their loans to the US private sector and to foreign governments, which raised the probabilities that their assets would suffer defaults. Since then academics and FDIC staff have written numerous books and papers on the moral hazard arising from deposit insurance. The message from this body of work is consistent: deposit insurance causes banks to take more risks. According to Professor Ed Kane in his *The Gathering Crisis in Federal Deposit Insurance*, which was published in 1985, 'Conflicts between the interests of the two parties to an insurance contract mean that, like acrobats working with the benefit of a safety net, insureds can afford to

20 Westerfield, *Money, Credit and Banking*, Ronald Press, New York, 1938, p. 969. See also Charles Calomiris and Eugene White, 'The origins of federal deposit insurance', in Calomiris, *US Bank Deregulation in Historical Perspective*, Cambridge University Press, Cambridge and New York, 2000, pp. 164–211.

be more daring than they could if they were not able to rely on insurance coverage to truncate their losses.' In his view the FDIC ought to restrict excessive risk-taking by bankers, but the FDIC was subject to political pressure to avoid restrictions and indeed to favour such risky lending practices as mortgage lending to low-income households. Kane even referred to 'the deposit-insurance subsidy to risk-taking', which increases 'the fragility of our financial system'.[21] Kane's conclusion was not new. In the 1930s a textbook on American banking noted that the most telling argument against deposit insurance was that it put all bankers 'on the same level, making the deposits in new, inexperienced, reckless, or dishonest banks as safe as deposits in old, proved, conservative and honest banks'.[22]

King has emphasised the moral hazard supposedly implicit in last-resort lending by the central bank and urged an expansion of deposit insurance. The truth is that commercial banks do everything they can to avoid last-resort borrowing, which is expensive and humiliating, and usually ends the careers of the executives initiating it. By contrast, decades of experience in the USA show that deposit insurance tends to encourage excessive and improper risk-taking by banks. The phrase 'moral hazard' ought to be associated with deposit insurance, not with last-resort lending.

King's philosophy of central banking

The last few paragraphs have been highly critical both of the latest

21 Edward J. Kane, *The Gathering Crisis in Federal Deposit Insurance*, MIT Press, Cambridge, MA, 1985, pp. 145–6. The quotation earlier in the text comes from pp. 14–15.

22 Westerfield, op. cit., p. 980.

trends in public policy towards the British banking industry and, in particular, of arguments and proposals made by the current governor of the Bank of England, Mervyn King. But King is far from alone in his views. Indeed, he can appeal to a substantial body of doctrine in his support. He can be seen as the most prominent current representative of a distinguished school of thought which goes back almost two hundred years. This school will be labelled 'the Currency School' in order to take the discussion forward, although readers should be warned that the real-world Currency School of early Victorian times was more subtle than is being suggested here.

A key tenet of the Currency School is that the central bank should not lend to the private sector at all. According to its originators in the early nineteenth century, money issuance is of two very different kinds, notes and deposits. Experience has shown that people value uniformity and reliability in their notes, so that the universal long-run trend has been for notes to be issued by only one institution (the central bank) and to have legal-tender status.[23] Given the special nature of the legal-tender note issue, the Currency School recommends that the central bank's assets should consist either of so-called 'hard assets', such as gold and silver, or of claims on the government. It follows that the central bank, the bank of issue, should not demean itself by transacting with any private sector agent. An obvious extension of this line of thought is that the central bank has no responsibility to lend to a bank suffering from a lack of liquidity and so should not be a

23 This proposition is denied by many members of the Free Banking school. Larry White, a supporter of free banking, has argued, however, that 'a unit of account emerges wedded to a general medium of exchange'. Lawrence H. White, 'Competitive payments systems and the unit of account', *American Economic Review*, 74(4), 1984, pp. 699–712: the quotation is from p. 711.

lender of last resort. The Currency School's attitude towards the second type of money, the bank deposit, is dismissive. Deposits are of course issued by privately owned commercial banks subject to an assortment of motives, of which profit maximisation is the most important. Bank deposits are supposed to be convertible into notes, but – according to at least one version of the Currency School – the preservation of that convertibility is a matter for the private sector and should not be of concern to the note-issuing central bank. By extension, the banking system is of no more interest to economic policymakers than, say, the car industry or food manufacturing.[24]

Perhaps the earliest statement of this set of views was by David Ricardo in his pamphlet *Plan for a National Bank*, which was published in 1824 shortly after his death. He advocated that the note-issuing function of the Bank of England should be transferred to a newly created National Bank, where the notes were to be fully collateralised by bullion. The National Bank would maintain the government's account and so act as banker to the government, but – unlike the Bank of England – it would not lend to any private sector corporation or individual.[25] Ricardo's pamphlet was republished in 1838 and must have been a major influence on the 1844 Bank Charter Act. The 1844 Act did not establish a new national bank, but it split the Bank of England into

24 The Currency School is an intellectual ancestor of New Classical Economics. In a well-known 1980 article on 'Banking in a theory of finance', one of the leaders of New Classical thinking, Eugene Fama, denied that the banking system has any particular significance for the economy's general equilibrium. E. Fama, 'Banking in a theory of finance', *Journal of Monetary Economics*, 6, 1980, pp. 39–57.

25 Ricardo's proposals for a National Bank are presented at various points in Piero Sraffa (ed.), *The Works and Correspondence of David Ricardo*, vol. V: *Speeches and Evidence*, Cambridge University Press for the Royal Economic Society, Cambridge, 1952.

two. The job of the Issue Department was to issue legal-tender notes against the backing of bullion in the Bank's vaults, with only a small unbacked 'fiduciary issue'; the task of the Banking Department was to lend money like other banks and make a profit for the shareholders. In substance the Issue Department was Ricardo's National Bank.

The same underlying thinking has resurfaced on several occasions and taken a variety of forms. In 1935 Irving Fisher advocated what he called '100% Money' in a book of that name. The heart of the proposal was that banks' sight deposits should be fully backed by legal-tender notes. Since the state could control the volume of legal-tender notes, the 100 per cent cash reserve requirement would enable it also to control the level of sight deposits. When Fisher was writing some economists believed that 'money' consisted of the public's note holdings and their sight deposits with the banks, and that time deposits were not properly 'money'; indeed, many economists still hold this belief.[26] For them Fisher's 100 per cent money proposal had an important merit, that it would end private sector banks' ability to create new money balances by extending credit. Fisher believed in a monetary theory of the business cycle, and was confident that 100 per cent money would end booms and depressions. In his words, 'This 100 per cent plan is the only plan that would absolutely separate the control of money from banking.'[27] So, as with Ricardo in 1824, the creation of those assets that are genuinely 'money' is to lie entirely

26 See, for example, Allan Meltzer's tendency to equate M1 (which excludes time deposits) with 'the money supply' in his *A History of the Federal Reserve*, University of Chicago Press, Chicago, 2003.

27 William J. Barber (ed.), *The Works of Irving Fisher*, vol. 11: *100% Money*, Pickering & Chatto, London, 1997 (originally published in 1935 by the Adelphi Company of New York), p. 7.

with the state. Not only should the business of banking be entirely separate from money creation, but the private sector's allegedly dangerous ability to create money balances must be outlawed.

The latest expression of these ideas has come from proponents of so-called 'narrow banking'. Narrow banking comes to much the same thing as Fisher's 100 per cent plan, although with a range of nuances. Sometimes the proposal is that *all* bank liabilities must be matched with cash or with a mixture of cash and government securities, and that credit should no longer be extended by 'banks', but instead by distinct 'finance companies'. It needs to be emphasised that, although these notions strike at the institutional foundations of a contemporary market economy, their supporters are not mavericks. Maurice Allais, the French economist who won the Nobel Prize in 1988, has said, 'In essence the present creation of money out of nothing by the banking system is similar to the creation of money by counterfeiters, so rightly condemned by the law.'[28] Milton Friedman and James Tobin, also winners of the Nobel Prize for economics, both wrote articles sympathetic to the 100 per cent reserves principle, although these articles do not seem to have become their settled verdicts on the question.[29]

Is there an affinity between these ideas – the ideas that began with the Currency School in early-nineteenth-century Britain – and recent statements from Mervyn King? As already noted, in several of these statements King has expressed an obvious distaste for Bank of England lending to any private sector

28 The author has been unable to obtain the original source for this quotation, which appears in Allais's Wikipedia entry.

29 For Friedman, see 'A monetary and fiscal framework for monetary stability', *American Economic Review*, 38(3), 1948, pp. 245–64; for Tobin, see 'Financial innovation and deregulation in perspective', *Bank of Japan Monetary and Economic Studies*, 3, 1985, pp. 19–29.

organisation. He is willing for the Bank to engage in repo transactions with commercial banks, since such transactions envisage early cash repayment at an agreed rate. Indeed, if the Bank were not to engage in such transactions, it could not set the short-term interest rate that King certainly regards as key to the Bank's delivery of monetary stability.

But King has been opposed to more meaningful loans, loans that may last over an extended period, imply an element of negotiation about the terms and carry the possibility, however faint, that the Bank of England would not get its money back. That is certainly an interpretation allowed by his attitude towards Lloyds TSB's request for a facility to further its possible acquisition of Northern Rock in the summer of 2007. It is further confirmed both by the Bank's eagerness to shunt the Northern Rock loan off its balance sheet and hand it over to the Treasury, and by further remarks from King on 11 September 2008 (to the Treasury Committee of the House of Commons) in which he said that it had never been a central bank's job to provide long-term loans to banks. He claimed that only private savers or taxpayers via the government could provide such funds.[30]

King's statement is plain wrong. As a logical matter, if commercial banks are able to provide long-term inter-bank lines to each other (and they certainly can do this), the central bank must also be able to extend long-term loans to banks. As a matter of fact, the Bank of England has on numerous instances extended loans to privately owned banks which have either had an

30 King's claim is contradicted by numerous examples in the Bank's own history. For example, in the early 1930s Lazards received a large loan which lasted for several years; Richard Sayers, *The Bank of England 1891–1944*, Cambridge University Press, Cambridge, 1976, p. 532.

eventual term of several years or have been so regularly renewed that their effective terms have in fact been several years. (See the discussion of the duration of last-resort facilities in Chapter 5.) In sharp contrast to King's position, Ben Bernanke, chairman of the USA's Federal Reserve, said in August 2008, 'Unless I hear from Congress that I should not be responding to a crisis situation, I think that it's a long-standing role of the central bank to use its lender-of-last-resort facilities.'[31] Without doubt many of the loans extended by the Federal Reserve in 2008 will last for several years.

Is it going too far to suggest that King wants the Bank of England to drop the lender-of-last-resort role? Is his vision of a central bank that it should be restricted to the setting of interest rates and the attainment of monetary stability, with the job of maintaining financial stability given to other agencies? And would not this model of the Bank of England's role reduce it to not much more than a large-scale economic research department?

Chapters 3 to 5 of this study argued that central banking allowed banks to reduce their ratios of cash and capital to their assets, and so lowered the cost of finance to non-banks, but that these benefits could be enjoyed only if the central bank had a lender-of-last-resort function. The present trend in British public policy is away from this conception of the relationship between commercial banks and the central bank, and instead towards King's model of the central bank as economic research department. This trend is misguided and must be resisted. Nevertheless, it is important to understand that King's attitudes towards the subject have much in common with those discussed approvingly by figures like Ricardo, Irving Fisher, Maurice Allais, Tobin and

31 Quotation from 'Hire the A-Team', *The Economist*, 9 August 2008, p. 66.

even Milton Friedman. King could be regarded as the most recent of a long line of influential representatives of the Currency School tradition.