Harsh arithmetic behind the banking crisis

The $700 billion bailout seems much more reasonable when you understand how crippling a fall in a bank's assets is

Tim Congdon

Banks are strange institutions. They can epitomise the free market at its best and also indulge in some of the worst forms of financial skulduggery just on the right side of the law; they are both the standard-bearers of the capitalist system and, too often, its worst advertisement.

But, for the layperson, perhaps the oddest feature of banking is its arithmetic. When other businesses deal with each other they assume, correctly in most cases, that the assets — the land, the buildings, the machinery — belong largely or wholly to their shareholders. But most banks' assets consist of loans and are owned to a small extent only by their shareholders.

Typically, the part of the banks' assets that belongs to shareholders — the capital — is less than 5 per cent of the total. In the jargon, banks' capital-to-asset ratios are under 5 per cent. The capital is needed to protect the banks' depositors, who own more than 95 per cent of the claims on a bank, against bad risks in the loan portfolios.

When this is explained to them, the first reaction of most people is to run. However, British high street banks have operated with capital-to-asset ratios of about 5 per cent for many decades, and their customers have been able safely to deposit money and withdraw it on literally billions of occasions.

The point is that banks have learnt how to ensure that their borrowing customers pay back loans in full and on time. In most years the losses from unpaid loans are comfortably exceeded by profits from interest income and an assortment of fees. But every now and again, the banks take too many risks and the arithmetic turns sour.

In the past few years, commercial banks — Britain's high street and America's Main Street banks that take deposits from the public and process cheques — have purchased large quantities of so-called structured finance products from investment banks. (The latter differ from commercial banks in two main respects, that they trade and underwrite securities, and that their executives are — or were — even more stupendously overpaid.)

In principle the typical structured finance product bought by a commercial bank has been very safe and, when issued, was given a triple-A rating by the credit rating agencies. These triple-A securities ought to repay 100 cents in the dollar, 100 pence in the pound, 100 cents in the euro and so on. The great majority of them probably will repay in this way, despite the recent shenanigans.

Unfortunately, last year the wholesale money markets closed up for a wide variety of reasons, of which the most important was the fall in American house prices and the implications of that fall for the value of the structured finance securities. Triple-A securities dropped in value, often by 10 to 20 per cent. If such securities were, say, 10 per cent of high street bank assets then they had lost 1 or 2 per cent of the value of all their assets.

A downward spiral called debt deflation can engulf the system

That sounds trifling, hardly enough to threaten the banks' charitable donations let alone the future of capitalism. But here comes the vicious arithmetic. A drop in the value of assets of 2 per cent wipes out 40 per cent of the capital of an organisation such as a bank that is only 5 per cent owned by its shareholders. According to rules developed by international financial bureaucrats in Basle over the past 20 years, a bank that has lost a big chunk of its capital must — at least theoretically — shrink its assets to restore the sacred capital-to-assets ratio to its original level.

A ghastly downward spiral, called "debt deflation", can now engulf the system. The banks can shrink their assets by selling off securities or forcing their customers to repay loans. But sales of securities aggravate the fall in their price, and forcing customers to repay loans is even more gruesome. As loan portfolios decline, so does the level of bank deposits. Bank deposits are the principal form of money in today's world. If the quantity of money goes down, so do asset prices, incomes and spending.

None of the above, despite its overwhelming significance for employment and living standards, is rocket science. Ben Bernanke, the Chairman of the Federal Reserve, has written extensively about the Great Depression of the 1930s, the worst example so far of debt deflation.

The downward spiral is caused by a logjam that prevents market agents from pricing assets correctly. The textbook answer is well known and was applied by the Bank of England on many occasions in the 19th and 20th centuries. The central bank, assisted by the Government, must move into the markets and buy up every decent security in sight. Instead of the triple-A securities trading at 80 or 85 cents, heavy official purchases could raise the price to 90 or 95 cents. The banks can start to write back their capital and to lend again, ending the crisis.

Like Mr Bernanke, the US Treasury Secretary Hank Paulson knows that big government or central bank purchases of securities must be the priority in an extreme crisis of the present kind. That was the rationale for the Paulson plan of a fund of up to $700 billion to buy in the banks' blighted securities. It was the right thing to do, but Congress didn't like Mr Paulson's chumminess with the bankers.

Given the harsh arithmetic of a modern banking system, Mr Paulson and Mr Bernanke must try, try and try again to get a similar package through the American political system. If Congress remains pig-headed, a big cut in interest rates, possibly to zero, could be needed to rescue the banking systems and economic prosperity of the leading industrial countries.

Tim Congdon is an economist and writer, who served on the Treasury Panel of Independent Forecasters (the Wise Men) under the last Conservative Government