Napoleonic Wars, the First World War and the Second World War. Relative to the pre-crisis trend, it seems quite likely to cost something quite close to six times annual GDP; it might be much worse. In Ireland, the crisis has imposed a rise in net public debt of close to 100 per cent of GDP. Professor Goodhart is right in saying there is a strong preference for a financial system that mismatches maturity, not to mention riskiness. But one must ask: at what price?

The upheaval involved in moving towards anything similar to the Chicago Plan or Kotlikoff’s updated version might be large. The same is true of plans to replace conventional banking with government-created money. It is understandable that few want to take the risk of embarking on such a contentious and complex reform. Bankers managed to see off the Chicago Plan even in the depth of the 1930s. Nowadays, their task would be far easier, because the slump has thankfully been milder.

A halfway house to a shift to the Chicago Plan does exist, however. It would consist of insisting that demand deposits or maybe just insured deposits would be backed by safe and highly liquid assets: central-bank reserves or short-term government securities. This is narrow banking. Such narrow banks could be separate institutions or parts of bigger ones. The problem with narrow banking, to which both the Chicago Plan and Limited Purpose Banking might be an answer, is that the fragility would migrate elsewhere in the system, as happened with shadow banking. The Federal Reserve had no plans for intervening in money-market funds or wholesale markets, though the latter is where many of the most significant mismatches had migrated. Thus if narrow banking were really to work, it would be necessary either to ensure that the fragility did not emerge somewhere else (previously unrecognized) in the financial system, as the more radical proposals for reform suggest, perhaps by insisting that all other finance took the form of equity contracts, or to make it credible that the central bank and government would never intervene to help the rest of the financial system if it fell into trouble. But such a promise is, as economists elegantly say, ‘time inconsistent’. If someone had asked the Federal Reserve whether it would ever bail out AIG, the shadow provider of shadow capital to the shadow-banking system, its answer would surely have been: no. But that was before September 2008, and then suddenly it was another world.

It would be fascinating to see the Chicago Plan or Kotlikoff’s Limited Purpose Banking tried. Even an experiment with narrow banking would be informative. But the difficulties involved in making such a transition would be huge. So let’s first consider less radical ways of buttressing a system that would still be much like our own. For that, we must begin with equity, the only unquestionably loss-absorbing form of finance.

A CAPITAL SOLUTION

A bank can fund its assets with two sources of funds: equity and debt. Depositors often believe that the money they have put into their bank belongs to them. In fact, it is just part of their bank’s debts. Of course, they are a politically important part of a bank’s debts. This is why deposit insurance has become universal. It is unthinkable that banks would be allowed to default on small deposits in a universal-suffrage democracy. Indeed, when Iceland’s banks got into such severe difficulty in 2008, the government imposed default on their foreign creditors, since the combined balance sheets of the banks, at eleven times GDP, were far too big for it to guarantee, but it protected domestic depositors. Elsewhere, in the worst of the crisis, blanket government guarantees turned not just the insured deposits, but almost all bank debt, effectively into public debt. In some cases, the creditworthiness of the state was put at risk in order to guarantee the debt of banks. Ireland is an extreme example of this unconscionable development: the debt taken on by the Irish state merely to fund the bailout of the creditors of its banks was around a third of GDP.

The Business Model of Banking

A cynic would say that the business model of banks consists of creating enormous quantities of explicit and implicit public debt — in the UK case, not far short of five times GDP — as a by-product of their
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other activities. That is why one might view bankers as merely exceptionally highly paid civil servants. But creating implicit public debt is not the whole of the business model. The other—and closely connected—part is minimizing reliance on shareholders’ equity as a source of funding. It is then easy to set a high target for the return on equity, unadjusted for risk. Before the crisis, that target used to be 15 per cent or even more. Achieving that target was then used as a benchmark for paying out generous bonuses to employees.

In a non-financial business, promising to raise the return on equity by increasing the ratio of debt to equity—that is, by increasing the leverage—is not seen as a wealth-enhancing strategy. It is a zero-sum speculative strategy. Indeed, one of the fundamental theorems in finance—known, as the Modigliani-Miller theorem (after its discoverers, Franco Modigliani and Merton Miller, both winners of the Nobel Prize in economics)—is that the way a business is financed does not influence how valuable it is, apart from any tax benefits from leverage.¹⁹ Finance merely determines how risk is distributed among those who fund the business. Indeed, since bankruptcy is normally destructive and high leverage makes bankruptcy more likely, well-established businesses generally avoid it. If British Petroleum (BP) had been as leveraged as a bank, the disaster in the Gulf of Mexico in 2010 would have bankrupted it.

Higher leverage makes debt riskier and so its cost higher. The expected return on equity rises, but this is compensation for the rising volatility of the returns. The investors who buy shares in businesses with risky funding models are those who like the combination of higher return with higher risk. When banks tell the world that their shareholders want the high expected returns they promise, they are probably right. But the shareholders are self-selected. People who would like an expected return of, say, 8 per cent with low volatility would not now buy bank shares. When banks told shareholders they intended to earn 15 per cent returns on equity, they were telling them they intended to run a risky business. They were also, as we know, telling the truth.

There is, however, one reason why high leverage might be attractive to shareholders, even in the absence of government guarantees: debt overhangs. In their important book on the perils of high bank

leverage, professors Anat Admati of Stanford University and Martin Hellwig of the Max Planck Institute for Research on Collective Goods use the example of Kate, a woman who has borrowed $270,000 to buy a house for $300,000. Suppose she inherits $50,000 and uses that money to pay off part of her loan. She then owes $220,000. Now, the creditor is fully protected against loss if the house loses $80,000 in value instead of the protection of $30,000 the creditor obtained from Kate’s initial equity. But what does Kate gain from putting an extra $50,000 into the house? She gains nothing, unless her rate of interest is lowered. If she cannot obtain a reduction in the rate of interest she pays, Kate has no incentive to repay any of the loan, because the benefit goes to her creditor, not to her. If she can find an investment with a higher post-tax return than the cost of her mortgage, she should put her money in that instead. If the value of her house rises, Kate will even have an interest in adding a second mortgage, to limit her potential losses.³⁰

Now consider an extreme—but, alas, plausible—scenario for both house buyers and banks. Suppose Kate’s house fell in value to $150,000. Her equity in the house would then fall from plus $30,000 to minus $120,000. If she were to put her inheritance of $50,000 into repaying the mortgage, she would still owe $70,000 more than the house was worth. On the assumption that this is a non-recourse loan (one where the creditor has no claim against her assets or income, beyond whatever the house is worth), the only entity that would benefit from her putting in the extra $50,000 is the creditor, whose loss would be reduced by that amount. Kate would gain nothing. It would make more sense for Kate to put her $50,000 in a risky investment. If it came off, the money would be hers. If it did not, she would be no worse off than if she sank the money into her house, since this would only benefit her creditor: it does not matter to her, after all, whether her creditor loses $120,000 or $70,000. Her loss is still limited to the initial $30,000 she invested. So Kate would choose ‘gambling for resurrection’. It is what one would expect anybody with negative equity to do.

This is also relevant to banks. These are businesses with next to no equity in good times whose shareholders enjoy the benefits of limited liability: in other words, loans to banks (or any other company) are
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non-recourse. If the bank were to fall into negative equity – extremely likely to happen, in fact, given how leveraged they are – the downside would no longer matter to shareholders, since the losses fall on creditors or the government. So it would make sense to gamble on ‘resurrection’ or ‘go for broke’. They can do this quite easily by taking on riskier loans and adopting riskier trading strategies.

Yet banks also enjoy explicit and implicit guarantees from the state (as is true of some house buyers). This means that not only shareholders, as we have seen, but even creditors fail to benefit if the shareholders decide to put more equity into the business. The only people who benefit from there being more equity in banks are taxpayers and other outsiders. Thus, those engaged in the wider economy would be less likely to suffer the results of a contagious panic and a huge recession if banks were better capitalized. In this situation, what is the optimal amount of equity for shareholders to put in? The answer is: as little as they can get away with. In the run-up to the crisis, that turned out to be amazingly little – just before the crisis, the median leverage ratio (ratio of debt to equity) in UK banks – that is, the value in the middle of the distribution, not at the extremes – was 50:1.31 In other words, the median equity (equity of the bank in the middle of the distribution) was roughly 2 per cent of assets. And this means that the value of those assets needed to fall about 2 per cent before the business was bankrupt.

So the business model of contemporary banking is this: employ as much implicitly or explicitly guaranteed debt as possible; employ as little equity as one can; invest in high-risk assets; promise a high return on equity, unadjusted for risk; link bonuses to the achievement of this return target in the short term; ensure that as little as possible of those rewards are clawed back in the event of catastrophe; and become rich. This is a wonderful business model for bankers. But how is it for the rest of the world? The evidence suggests executives fared spectacularly well. But even shareholders have fared poorly. For everybody else, it was a disaster.32

The solution seems clear: force banks to fund themselves with equity to a far greater extent than they do today. A fragile business based on extreme maturity and risk mismatches (long-term and risky assets funded by short-term liabilities and notionally safe liabilities),

needs the capacity to bear large losses, particularly if failure is likely to cause a global economic meltdown. Much higher equity would protect creditors, remove debt overhangs and eliminate the shareholders’ incentive to go for broke. It would also make government promises not to save creditors more credible, since the failure of one institution would be less likely to bring down many others.

The Case for Higher Capital

So how much capital would do? A great deal more than the 3 per cent ratio being discussed in Basel is the answer. How can anybody seriously imagine that it is sensible to allow such important businesses and ones whose failure would cause such damage to operate with such a tiny equity cushion? A mere 3 per cent decline in the value of its assets would bankrupt the business. Well before it reached that point, the bank would be unable to raise funds on market terms and so would cease to be a going concern. If one wants to understand why such tiny equity slivers will not do, just look at the reported profits of

Figure 38. Real Profits of US Financial Sector
(US$bn, banks and insurance, deflated by GDP deflator, 2009=100)

Source: Bureau of Economic Analysis