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Incentivising boring banking: an alternative approach

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Executive Summary

- Since the financial crisis of 2007-9, many commentators have urged that banks be separated into retail deposit-taking and lending for personal loans, mortgages, and standard commercial loans, and investment banking activities such as securitisation and proprietary trading. Indeed, in the UK the Coalition government has announced a year-long commission to review such a separation. In this paper we make a proposal that cuts across and renders superfluous that retail/investment banking concept. Instead of restricting universal banking and creating a separation *between* institutions, we shall propose a separation *within* institutions, specifically between deposit-taking intended primarily for *storage* purposes and deposit-taking for *investment* purposes. One of the most important features of this system is that it would allow us to abolish the current system of deposit insurance.
- Deposit insurance is the system whereby the state promises to recompense depositors in banks some proportion of the value of their deposits in the event that the bank fails. Until 1979, the UK had never had deposit insurance, it being then introduced via a European Directive. More recently, in the financial crisis it came to appear that all deposits must be insured.
- Deposit insurance creates considerable moral hazard, encouraging fractional reserve banks (the standard banks we have now, that hold only a small proportion of their obligations in highly liquid form) to behave in excessively risky ways, destroying the value of "safe" banking practices and thereby driving out "boring banking", forcing the state to become heavily involved in regulating the allocation of capital in loans, significantly undermining the functioning of private capitalism.
- On the other hand, we argue that deposit insurance seems impossible to avoid. Significant episodes of depositor losses can lead to widespread social unrest.
- We suggest there are four ways to respond to this paradox: living with it; nationalising the deposit-taking banks; forbidding fractional reserve banking; something else.

- We explore suggestions for forbidding fractional reserve banking, replacing such banks with "100%-backed" banks that must hold highly liquid assets sufficient to meet all of their liquid liabilities on demand. Well-known advocates of such a proposal include Irving Fisher and Milton Friedman, historically, and Laurence Kotlikoff today. Requiring all banks to be 100%-backed might result in a more stable banking system, but there would also probably be slower growth, inefficiency in resource use, and a significant impingement upon freedom of contract.
- We explore the history of 100%-backed banks, which (in the form of "savings banks") were common in the UK until the 1980s, probably being driven out partly by the introduction of deposit insurance, partly by the era of high inflation in the 1970s, and partly by the extended period in which there were no depositor losses (and few significant crises) in fractional reserve banks.
- We consider whether there might be an option of returning to the pre-1979 UK banking structure, with widespread 100%-backed savings banks co-existing with fractional reserve banks (without deposit insurance), and consumers able to choose in which sort of bank they wished to deposit. We conclude that although there might be advantages to such an arrangement, it could be difficult to deliver a credible promise not to provide deposit insurance to the fractional reserve banks.
- As an alternative, we propose that all banks licensed to accept retail deposits should be required to offer 100%-backed (legally nested) "storage deposit" accounts (the backing would take the form of government gilts, so increasing demand for such gilts and potentially reducing the gilt rate). Standard fractional reserve "investment deposit" accounts would also be permitted, but would not be insured. We discuss some regulations in terms of crisis management that we believe would allow this structure to credibly remove all deposit insurance from investment deposits.

1) The pros and cons of deposit insurance

Deposit insurance is the system whereby the state promises to recompense depositors in banks some proportion of the value of their deposits in the event that the bank fails. Until 1979, the UK had never had deposit insurance. It was then introduced as required by a European Directive.[1] Levels of deposit insurance increased during the 1980s, 1990s and 2000s.[2] Then in 2007, in response to fears over the solvency of Northern Rock and a consequent run on its deposits, the British government offered a 100% guarantee of all deposits held there, and increased the protection of deposits to 100% to all other deposits under the scheme. From October 2008, the overall level of deposits insured was increased to £50,000 to match the level offered by Irish banks.

We shall now explore a tension between two apparently irreconcilable points.

- First, deposit insurance is economically undesirable and financially destabilizing, to the point of seriously undermining the entire merit of private capitalism.
- It seems impossible to politicians, in practice, to allow depositors to lose any money.

In this first section we shall set up this paradox, before in the subsequent sections investigating three alternative structures of the banking sector that we believe would resolve it: (i) a radical system, often favoured by academics, in which all bank deposits must be 100%-backed by government bonds or other similarly low-risk high-liquidity assets; (ii) a system in which some banks ("savings banks") are available offering 100%-backed deposits whilst at the same time other standard fractional reserve banks (without deposit insurance) are permitted (this was the system in the UK until 1979); (iii) a system in which all banks licensed to accept retail deposits must offer legally nested 100%-backed "storage deposit" (savings deposit) accounts, but are also permitted to engage at the same time in standard fractional reserve banking using "investment deposits". We shall explain why the last of these is our preferred system.

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[1] The first EEC Directive on the coordination of laws, regulations and administrative provisions relating to the taking up and pursuit of the business of credit institutions (77/780/EEC), implemented into UK law through the 1979 Banking Act.

[2] The level of protection was amended under the Banking Act 1987, to 90% of bank's total liability to a depositor in respect of protected deposits subject to a maximum payment of £18,000 (£20,000 protected deposits). The European Union introduced rules for all member states on 30 May 1994 on deposit guarantee schemes in Directive 94/19/EC (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31994L0019:EN:HTML). Provisions included a minimum €20,000 deposit insurance to be introduced by 1999 (€15,000 up until that point if under existing schemes), and a requirement that whilst deposit insurance can be on a % basis (co-insurance), it must be at least equal to 90% of the minimums above. On 30 November 2001 the Financial Services Compensation Scheme (FSCS) took over responsibility for deposit protection in the UK under the terms of FSMA 2000 (Deposit Protection Scheme ceases to exist). The FSCS levels of insurance were 100% of the first £2,000 guaranteed and 90% of £2,000 to £35,000.

Why deposit insurance is a terrible idea

In our considerations here, to simplify the discussion, we shall first focus upon an entirely traditional concept of banking, in which banks take in money from depositors and lend money out to households and businesses. We shall thus initially set aside all of the important and interesting discussion about to what extent banks should engage in complex derivatives trading or other investment banking activities. Later, we shall bring back in some consideration of more exotic activities, and take some account of other sources of funds for banks, such as wholesale money markets.

Traditional banks hold only a fraction of their total obligations (the total deposits) in liquid forms such as cash (in the jargon, they have only a "fractional reserve"). But deposits are available for withdrawal at fairly short notice — indeed, some are simply on-call. A well-known consequence is that any fractional reserve bank can face liquidity problems if too many of its depositors attempt to withdraw their money at the same time. Banks can, in such a situation, attempt to borrow from other banks or from the central bank to provide liquidity (typically providing collateral in exchange), but a very large proportion of depositors attempting simultaneous withdrawals (as in a bank run) would be a challenging situation even for a highly solvent fractional reserve bank. Famously, the Bank of the United States failed in December 1930 and then paid 92.5 cents in the dollar, suggesting it would almost certainly have been solvent as a going concern, but was wiped out by a bank run as part of the US panics of 1930-32.[3]

Even setting aside the risks of bank runs, fractional reserve banking is intrinsically risky, both in terms of liquidity risk and in terms of solvency risk. Banks loan out money to consumers and businesses, knowing that not all of these loans will be repaid in full. In principle, if a sufficient number of these loans went bad, the bank would be rendered insolvent, unable to pay back all deposits.

Those depositing money in banks are investors. They take a risk — the risk of the bank failing for liquidity or solvency reasons (including not only those mentioned above, but also other risks, such as fraud) — and for taking that risk they receive a reward: the interest paid on their deposits.

[3] In the words of Milton Friedman, "finally, after an all night meeting on December 10, 1930, the other bankers, including in particular John Pierpont Morgan, refused to subscribe to the guarantee fund and the plan was off. The next day the Bank of United States closed its doors, never again to open for business. For its depositors who saw their savings tied up and their businesses destroyed, the closing was tragic. Yet when the bank was finally liquidated, in the worst years of the depression, it paid back 92.5 cents on the dollar. Had the other banks cooperated to save it, no one would have lost a penny."

If deposits are insured by the state, that removes the risk to depositors.[4] That will have two consequences. First, the volume of deposits will grow.[5] Second, deposits will simply go to wherever deposit interest rates are highest. The banks able to offer the highest deposit rates are those that themselves make the highest returns with what they do with those deposits. Those making the highest returns will, *ceteris paribus*, be the banks taking the highest risks — e.g. lending to higher-risk borrowers, leveraging up to greater degrees, engaging in more exotic practices (such as property speculation or derivatives trading). So depositors will find no attraction in placing their money in "boring" low-risk banks, but will instead prefer to put all of their money in higher-risk banks. Since low-risk banks will be unable to attract deposits, they will be driven out of the market and only high-risk banks will remain.

This problem can become particularly amplified in periods of financial crisis. For, as observed in the US Savings and Loans crisis of the 1980s, if banks become insolvent then the owners and managers of those banks lose their downside risk (once the bank is already insolvent, then if insolvency deteriorates the shareholders have not lost anything *further* — liquidation of an insolvent bank will not leave anything for shareholders anyway; similarly, employees will probably be dismissed if an insolvent bank is shut down, so further losses change little). But regulatory authorities may be reluctant to shut such banks down, preferring instead to leave them operating in the hope that they can trade their way out of insolvency (through making profits).[6] But then these insolvent banks have incentives to take huge risks with no downside. If these high risks make good returns, there will be ample funds to pay depositors high interest rates. So insolvent banks allowed to keep trading will tend to offer very high interest rates to depositors and take very high risks, and if those depositors are insured then they will move their money out of lower-risk solvent banks into these higher-risk insolvent ones, rendering the lower-risk banks insolvent, also.[7]

Similar processes were seen in the case of the Icelandic banks in late 2007 and early 2008 which offered high interest rates on deposits, reflecting their internal financial distress (e.g. Icesave was offering deposit rates of 7.01% in May 2008 when, by way of reference, Nationwide was at the time paying 6.15%), but into which people made deposits anyway, presumably comforted by some combination of the European Economic Area

[4] Strictly speaking, it reduces the risk to depositors to that of the government itself not meeting its obligations, but, although this is certainly a non-trivial issue (*vide* the value of the Irish sovereign guarantee at the time of writing) it is a nicety we shall ignore hereafter.

[5] This is inflationary, but we shall not explore that consequence in any great detail here.

[6] In the economics of banking literature these are referred to as "zombie" banks.

[7] Somewhat straining the metaphor, in the economics of banking literature this process is often referred to as "vampirism of the zombies", though sometimes it is simply seen as zombies creating other zombies.

scheme for deposit insurance and the assumption that the British government would provide deposit insurance if required (which it did).[8]

Deposit insurance thus tends to encourage excessive (i.e. inefficiently high) risk-taking on the part of banks. Of course, the state can restrict that risk-taking through regulation. But getting this just right is in practice very difficult. How much risk is too much? It must not be so little that no bank ever fails — old companies dying and new companies arising to replace them are integral parts of a healthy market system, and if there is no risk of failure there is neither innovation nor risk in lending, and entry by new players with new ideas will be very difficult. Regulators will find it very difficult, in practice, to assess risk optimally, and will need either to take a general approach of indulgence towards excessive risk-taking (accepting occasional bailouts in order to keep innovation and growth going) or great conservatism (restricting banks at well below the optimal level of risk-taking).

The reality is this: if depositors must be backed by the state, then deposits cannot be used for private lending. If the state is the ultimate allocator of most capital in the economy through its control of lending by the banks, capital allocation has ceased to be a private sector activity. The negative implications for the efficacy of private capitalism are clear and profound.

Why deposit insurance is necessary – indeed, in practice unavoidable

The arguments above have been recognised for many years. Indeed, the standard university textbook on the topic, Frederic Mishkin's *The Economics of Money, Banking, and Financial Markets*, includes an extended discussion of the destructive effects of deposit insurance in the Savings and Loans crisis of the 1980s.[9] But, despite this, all major developed economies have deposit insurance, and in the crisis of 2007-9, even the notional limits on deposit insurance stated in those schemes were not enforced.

In Britain, there has been no significant episode of depositor losses since the late nineteenth century. Episodes of depositor losses elsewhere in the world since then have not been the happiest from either an economic or a social perspective.

[8] To take a rather different sort of case, which nonetheless illustrates the potential for large volumes of deposits to move, some £10 billion deposits was moved out of other banks into the (HM Treasury-backed and hence as close to perfectly insured as is possible) National Savings and Investment (NS&I) from October to December 2008 — an 11% increase in a brief period.

[9] An example of Miskin's recent work on this subject is "Financial Consolidation: Dangers and Opportunities", *NBER Working Paper* No. 6655 (1998).

The banking panics of the early 1930s in the US resulted in widespread bankruptcies for depositors. This was not typically because depositors lost vast sums upon liquidation (typical losses for depositors were less than 20% of deposit balances[10]). But the process of liquidation of failed banks was often extended, typically taking of the order of two years for resolution, and during this period depositors lacked access to their funds. Lacking this access, they found themselves unable to pay the mortgages on their houses or farms and were driven into default.

In addition banking panics in other countries have been associated with a breakdown in social order and violent disturbances. The devastating 2000-2002 economic crisis in Argentina culminated in days of rioting in December 2001 with 22 people killed, and the ransacking of homes and supermarkets across the country. Tear gas, rubber bullets and water cannons were not enough to prevent President De La Rua from declaring a state of siege and being forced to resign. After their own banking crisis in November 2008, the Icelandic police were forced to defend a police station in the face of violent protests.

The paradox

So, we face the paradox that deposit insurance is dangerous and destabilising, but appears in practice unavoidable. How are we to proceed? We can identify broadly four options:

- **Carry on regardless –** OK. So deposit insurance is dangerous and destabilising and we would be better off without it, but we can't do without it, so perhaps we can just take that on the chin and live with a materially suboptimal depository system. The consequence might be some combination of invasive regulation of banks activities (reducing economic growth and hence social welfare) and bailing out depositors when the time comes (costing money, distorting incentives, acting in ways that are unfair to poorer non-saving taxpayers and to the advantage of rich savers with large deposits, effectively allowing the rich to act as *rentiers*, exploiting the political power their wealth gives them so as to insulate them from downside risk). But perhaps we could live with that.
- **Restrict deposit-taking to nationalised banks** – Many countries have restricted most retail deposit-taking to state-owned banks. This was not only true of Communist countries but also of non-Communist Southern European countries at various times until relatively recently.[11] Indeed, at the time of writing a high proportion of UK retail deposit-taking institutions are in full or majority public ownership. This option would merely require the continuation of the

[10] On this point, see Chpt. 12 of Friedman, M. & Schwartz, A., *A Monetary History of the United States, 1867-1960*, Princeton University Press.

[11] E.g. Italy's Banking Law of 1936 and Spain's Banking Law of 1962 each introduced widespread nationalisation of deposit-taking institutions. See 'Handbook on the History of European Banks', *European Association for Banking History* E.V., 1994.

current status quo, nationalising other banks at a later stage should they, too, become distressed.

- **Abolish fractional reserve banking** – Deposit insurance becomes an issue because of the intrinsically risky nature of fractional reserve banking. If, instead, we abolished fractional reserve banking and required all deposits to be 100% backed with highly liquid assets (to be "narrow banks"), the issue of deposit insurance would not arise. We shall explore this option in Section 2.
- **Something in between** – In Section 4 we shall explore a proposal that retains fractional reserve banking but should make it more feasible to allow depositors to make losses, in essence by combining the nesting of 100%-backed depository institutions within standard fractional reserve banks with various special crisis management measures.

It is worth noting that the problem is *not* addressed by dividing banks into so-called "utility" (retail banking) and "casino" (investment banking) elements (at least not *per se*). The standard form of this proposal involves a "utility" deposit-taking institution that takes in deposits (and does not borrow in wholesale money markets) and then lends to households (e.g. for mortgages) and to businesses. But business and household lending remain intrinsically risky activities (so banks could still, in principle, be rendered insolvent – and so unable to repay deposits – in a sufficiently serious recession) and the liquidity problem is unaffected or even exacerbated (a bank forbidden from borrowing in wholesale money markets would be more exposed to a depositor run since it would have fewer alternative sources of liquidity).

That said, it is perhaps of interest to observe that some of the best-known advocates of the utility/casino split (in particular, John Kay) believe that the utility component should be 100% backed – i.e. be narrow banks.

2) An alternative: 100%-backed banking

Concerns about fractional reserve banking are not new, and influential economists have been sceptical about the whole notion throughout the history of fiat currencies. The classic alternative structure is known as "100%-backed banking" or sometimes as "narrow banking" (though the term "narrow banking" also sometimes encompasses other changes we shall not discuss in detail here).[12]

[12] Famous historical advocates of variants of this concept have included Irving Fisher (particularly in his book *100% Money*) and Henry Simons. Modern advocates include John Kay and Kevin James, with Laurence Kotlikoff favouring the related "limited purpose banking" concept we discuss in more detail below.

In a 100%-backed banking structure, deposit-taking institutions must provide 100% backing for the deposits they take in the form of very low-risk assets such as government bonds.[13] Thus, fractional reserve banking would cease. Deposit-taking institutions would not engage in corporate lending or purchasing shares, currency, land or other more exotic financial market assets.

Other institutions, called "finance houses" in this literature, would arise to engage in lending for risky projects. Finance houses would raise their capital on domestic and international financial markets — but would not take deposits.

Advantages

Fisher himself identified the following advantages to his proposal[14]:

- **No more runs on banks –** runs on banks being conceived as driven by the fear that a fractional reserve bank cannot pay all its obligations and will pay only on a first-come-first-served basis.
- **Fewer bank failures –** since no bank runs, and also because banks are less likely to become insolvent.
- **The interest bearing government debt would be substantially reduced –** more debt would be funded by savings, so demand for debt would be higher, so the interest paid would be lower.
- **The monetary system would be simplified –** no complex processes to manage the risks associated with fractional reserve banking.
- **Banking would be simplified –** depositors would not need to have opinions about the risks associated with placing funds in banks.
- **Great inflations and deflations would be eliminated –** under a fractional reserve banking system, the banks create most of the money through leveraging up from small volumes of liquidity to large volumes of loans. When such monetary expansion runs out of central bank control, that is an important source of inflation. Likewise, when the banks become distressed, there is a temptation for the central bank to print large volumes of new base money, so as to create inflation and avoid widespread defaulting, thereby rescuing distressed banks. If the central bank does not or cannot do this, then banking distress can drive large contractions in bank money-creation and thus large contractions in the money stock, leading to deflation. In

[13] We note that some advocates, such as Fisher and Friedman, have said that transactions balances should be backed by immediately available high-powered money, whilst others such as Kareken and McCulloch have believed that it is enough for transactions deposits to be 100%-backed by government bonds. We shall finesse this interesting discussion here. For more on the point see McCulloch, J. H. (1986). "Bank Regulation and Deposit Insurance", *Journal of Business* 59 (1).

[14] This list drawn from http://www.cobdencentre.org/2010/01/100-money-irving-fisher/. The explanations are our own.

contrast, without fractional reserve banks, the ability for banks to create new money is curtailed, the risks of bank distress leading to deflation is curtailed, and the temptation for the central bank to inflate to avoid deflation is curtailed.

- **Booms and depressions would be greatly mitigated –** booms and depressions are closely related to credit cycles that are in turn associated with the activities of fractional reserve banks in expanding and contracting their lending. Without fractional reserve banking, credit cycles would be less, and thus booms and depressions would be less extreme.
- **Banker-management of industry would almost cease –** Fisher believed that it was usually in depressions that industries generally fell into the hands of bankers; he claimed that under his proposal great inflations and deflations would be eliminated (as it would eliminate the banks 'power to mint checkbook money and to destroy it') booms and depressions would be largely mitigated (as they are closely relate to the credit cycle) and thus banker-management of industry would almost cease.[15]

Modern advocates are less adamant that there would be quite such significant reductions in boom-and-bust or the elimination of all risk of significant inflations or deflations, but do note that under this structure (a) there would be no material possibility of depositors losing money, so any taxpayer bailouts to protect depositors would be restricted to special cases (e.g. if there had been a fraud) and involve only modest sums of money. Finance houses, on the other hand, would not have incentives to gamble with depositor money anticipating being bailed out by the taxpayer in the event something went wrong (there would be no "one way bet" problem), and so shareholders and bondholders in these institutions would have correct incentives to discipline their risk-taking and regulation of their activities could be fairly non-intrusive. (Obviously there would still be *some* regulation — e.g. they would be forbidden from taking deposits).

Drawbacks

Opponents raise a number of objections to the narrow banking idea:

- It is alleged that the pool of safe assets is too small to back narrow banks — critics have argued that there are not enough safe assets, such as cash, government bonds, high grade commercial paper, etc. to back all the savings deposits in the economy;
- It is alleged that the pools of liquid savings are not sufficient to support finance houses — investment in finance houses is, in large part, financed from savings deposits and under narrow banking this pool of savings would not be available for investment;

[15] Fisher, Irving (1935). *100% Money 3rd Edition.* New York: Adelphi P.

- Narrow banking removes an important economy of scope in liquidity provision — namely that the same pool of liquidity can serve to support the liquidity needs of depositors and of borrowers with credit lines;
- It is noted that past narrow banks, such as the Post Office Savings Bank and the Trustee Savings Bank, have tended to wither on the vine as savers took their money out to higher-yielding institutions beyond the narrow bank deposit-taking boundary. It is alleged that it would be impractical to prevent this. (We shall explore this point in much more detail below); and
- Worse than this, when there is a crisis, savers would then withdraw their funds from finance houses and place them into narrow depository banks. This would encourage pro-cyclical fluctuations across the deposit-taking boundary. Because institutions within the deposit-taking boundary are not permitted to provide credit, the consequence of the narrow banking system would be that credit would dry up almost completely during a crisis, increasing the pro-cyclicality of the system as a whole. (A variant of this objection will apply to our preferred scheme also, and is discussed in more detail below).

Limited purpose banking

Traditionally, deposits are denominated as a fixed number of currency units, while the assets corresponding to these deposits are mostly finite-term securities or commercial loans. As we have already stated, if depositors simultaneously want their deposits, under fractional reserve banking, the banks simply don't have it. To the extent that their assets are marketable, the banks can sell them off to meet withdrawals with only minimal losses. But if there is a run on the banking system as a whole, the banks' scramble for funds could conceivably drive interest rates up and asset prices down to the point the banks are actually insolvent simply because of depositor fears they might fail. If the banks' assets consist of poorly marketable commercial loans, they are even more exposed to the risk of runs. This inherent instability problem is the most commonly cited argument for deposit insurance, but we have already seen, deposit insurance increases risk-taking on the part of banks.

Economists have proposed an alternative system to remedy this problem, known as 'Limited Purpose Banking', arguing that the two critical functions of banking are to mediate the payments system, and to connect lenders to borrowers — a prominent proponent of this proposal in recent times is Laurence Kotlikoff.[16] In order to guarantee the first function banks should hold highly liquid assets (cash or short term government bonds) as 100% reserves against their deposits (current accounts). The possibility of a bank run is thus prevented and complete confidence in the payment system ensured.

[16] For more details see Kotlikoff, Laurence J. (2010) *Jimmy Stewart is Dead: Ending the World's Ongoing Financial Plague with Limited Purpose Banking.* London: John Wiley & Sons

Under Kotlikoff's system, any limited liability financial firm would have to operate as a mutual fund — that is, in effect, a bank with a capital requirement of 100 percent. These firms would act solely as financial intermediaries, connecting savers to investors. Mutual funds already make up one third of the current US financial sector and are regarded as having held up remarkably well during the crisis. Expanding this system, Kotlikoff has argued, is much wiser than rebuilding on the one that collapsed.

Under 'Limited Purpose Banking' investors, and not banks, would take on risk. Though mutual funds could still invest in any financial instrument, regardless of risk or complexity, they would do so only on investors' behalf and in a fully transparent manner, and since the mutual funds could not hold any investments of their own, the system would be immune to widespread contagion.

Limited purpose banking would also extend to the insurance industry. Currently, insurance firms guarantee fixed payoffs and are expected to cover aggregate risk: if, for example, a deadly epidemic were to break out, the life insurance industry would be liable for billions of dollars in payouts, likely rendering them insolvent. Under Kotlikoff's proposed payout system, however, individuals would enter into an insurance pool and, when they had a claim to payouts, would receive a share of the pool—rather than a fixed amount—preventing the insurance industry from ever having liabilities it could not pay.

Variants of this proposal have been argued previously as well, such as a two tier system with a 100%-backed tier backed by money market mutual funds. The money market mutual fund (MMMF) is a recent market innovation that solves the inherent instability problem of the payments system. Like all other mutual funds, money market mutual funds are run proof since their obligations to their investors are simply pro rata shares in the current market value of the funds' portfolio.[17] To the extent that depositors/investors line up at the front door to take their money out, the rate of return to depositing new funds will increase, and new depositors/investors will line up at the back door to put their money in. As long as the fund sticks to very short term instruments (20 days is a common average maturity for existing MMMFs), fluctuations in the market value of the portfolio will hardly be perceptible, and balances will be predictable enough to make cheque writing practical.

One important limitation of MMMFs is that their assets must be so highly marketable that there is at all times a clearly defined market price for each one, with only a small bid-ask spread. This means that MMMFs could not directly monetise the commercial loans that are an important part of fractional reserve banking.

[17] For more details see Kareken, John H. (1986) "Federal Bank Regulatory Policy: A description of some observations" *Journal of Business* 59.1

Illiquid commercial loans could nevertheless still be monetised indirectly through a two tiered system, as argued by some economists.[18] Under these proposals, each existing commercial bank would be split into two firms – the first would essentially be a finance company, making illiquid term loans, financed by issues of its own commercial paper with comparable maturity. The second firm would not be modified "100% reserve" bank but rather an MMMF holding, inter alia, the marketable commercial paper of other bifurcated commercial banks like itself.

Disadvantages of Limited Purpose Banking

There are those, including Lord Turner, who believe that Kotlikoff's proposals do not resolve the underlying problem of the volatility in the supply of credit, and what Turner believes to be an inherent bias to particular types of credit. Turner's contention is that volatility in the supply of credit will occur just as much in a securitisation of credit outside of the banking sector as within it, and hence that changing the structure of the banking sector does not improve matters.

He argues that the supply of credit by mutual funds could be just as volatile as the supply of credit from banks, since he believes that falls in mark to market valuations could lead to withdrawals by investors, resulting in the need for fire sales of assets and potentially destabilising abrupt ends to the supply of credit.

Another sceptic, Douglas Elliott, a Fellow at the Brookings Institute, has argued that while Limited Purpose Banks (LPBs) would largely resolve moral hazard and contagion issues, they would still be vulnerable to bubbles like those that formed in the real estate markets before the crisis. Additionally, Elliott has argued that giving such far-reaching power to a single regulatory body (FFA in the United States) would increase the likelihood of regulatory mismanagement, like that which preceded the crisis. He has suggested that simplifying financial instruments could reduce regulatory problems, but noted that this would be equally possible under the present system.

Other disadvantages from this type of structure are that the cost in terms of foregone efficiency would be too high to justify such a system. One of the key functions of banks is to transform assets from the safe, highly liquid kind that most people want into the ones that promote growth—typically long-term, illiquid investments. It has been argued that LPB would render them unable to do this. The advantages of a safer financial system should be balanced against the efficiency advantages of this "maturity transformation."

Critics have also claimed that business credit would become scarcer and more expensive. Many businesses rely on contingent commitments such as guarantees of lines of credit that can be borrowed from as need

[18] McCulloch, J. Huston (1986). "Bank Regulation and Deposit Insurance", *Journal of Business* 59.1

arises. These would be difficult, if not impossible, to have with LPBs. Kotlikoff has countered this claim by arguing that while LPB would limit the money supply, the amount of real credit (credit backed by assets) available would not change.

Kotlikoff claims that an economy with only LPBs may grow slightly slower than the current one, it would avoid major financial crises that cause sharp, painful recessions. However, it also has been noted by some that the occasional major loss may not necessarily be worse than a consistently slower growth rate. Finally, critics have argued that the transition to limited purpose banking would be turbulent, and could cause dangerous fluctuations in credit availability. The effects of economic policy, such as interest rate adjustments, could change significantly, requiring policy makers to engage in some trial-and-error before sound policy could be achieved.

What would be lost in removing fractional reserve banking?

Many of the critiques of 100%-backed banking concepts focus on their alleged impracticality. But there is a slightly different aspect of the matter worth considering. We have pointed out some of the drawbacks of fractional reserve banking, but we should also recall some of its key advantages. One we have mentioned already — namely that there is an economy of scope in liquidity provision, namely that the same pool of liquidity can serve to support the liquidity needs of depositors and of borrowers with credit lines. But there is a higher-level point worth making, namely that the use of a fractional reserve in the banking sector mirrors an efficient use of a fractional reserve in many real assets.

To understand what is being said here, consider a standard office environment, in which people sometimes want to make themselves cups of tea. There are probably enough cups in the office kitchen for everyone to be able to have a cup at the same time, but are there enough kettles? Would it be efficient if the implicit promise to allow tea-making in the office were "100%-backed" by its being possible for everyone in the office to use a kettle at the same time — thus requiring an individual kettle and plug and space for everyone in the office?

No. What happens is that by observing office practice over time, seeing how often people try to make themselves cups of tea and how often more than one attempts this at the same moment, we can have some approximate idea of how many kettles and how much space we need to accommodate people's tea-making needs. We thus have a "fractional reserve" of kettles, perhaps two for an office of twenty people.

Again, how many fire stations should there be in San Francisco? Should there be enough to deal with a fire in every house? Should there even be enough to deal with occasional plausible extreme demand peaks,

such as if there were to be a large earthquake? Or should there merely be enough to deal with ordinary expected levels of demand, with extreme peaks being dealt with in some other way (such as by temporarily "borrowing" fire engines from other areas — *cf* interbank lending to help address liquidity problems).

There are many other examples of real assets sharing this feature. Any constituent can lobby an MP at almost any time, but if all lobbied at a same time the MP resource would be exhausted. We do not have enough police to visit every house in the country at the same time. Most households do not have a toilet for every resident. If every car in Britain tried to drive to London at the same time there would not be adequate road space.

Financial assets simply stand in the place of real counterparts. Thus, setting aside for now the accuracy of specific accounts of how it is done (e.g. how convincing the argument is from scope efficiencies in lending and borrowing), we should expect that the efficiency gain that is associated with the use of fractional reserves in many real assets is associated with the use of fractional reserves in financial assets, also. More elaborate financial assets, when they work well, have the economic function of increasing further the efficiency with which limited resources are employed.[19] Economic theories of *how* this is done may be contentious; but *that* it is done should not be.

By itself, it does not follow that the gains from increased efficiency of resource use through fractional reserves outweigh the losses from the forms of instability we have rehearsed earlier. But it does suggest that if we can devise a system in which fractional reserve banking is preserved whilst the drawbacks are mitigated, then we would be preserving a concept that offers at the very least significant potential gains.

3) History of 100%-backed banking in the UK and elsewhere

UK History

It is not as widely appreciated as it might be that there is a well-established history of 100%-backed "narrow banks" in the UK. Classic well-known examples include NS&I (National Savings & Investments), which still

[19] A fairly straightforward example would be a "hedge". Without hedging, one would need to hold capital and liquidity buffers to protect oneself against downside risks. This would be true of an individual, a non-financial company, or a financial company, but let us take the example of an individual that might become unemployed. By hedging against unemployment, either in the form of unemployment insurance or in some more elaborate way such as purchasing a financial product that paid out precisely when there is a downturn in demand in the sector in which one works, you would provide yourself with an inflow of funds when one became unemployed. That would mean that one could afford to hold less in the way of cash savings, and so you could have more money invested in less liquid and more risky assets (such as a house or business). The less resources sit idle as protection against downside risk, and the more they are used (e.g. for living in or for producing output), the more efficient is the economy.

exists as a 100%-backed bank, and the trustee savings banks, which existed as 100%-backed banks until the 1980s (but are now fractional reserve banks within the Lloyds Banking Group).

NS&I was established by the government in 1861 as the "Post Office Savings Bank". It offered a simple savings scheme to help and encourage ordinary workers to be prudent and put some of their earnings aside to "provide for themselves against adversity and ill health". The deposits were wholly lent to the Government to invest and enjoyed 100% security, two key principles that have remained to this day.

In 1969 the bank was transferred from the Post Office to the Treasury, becoming a separate government department, and in 1996 it became an Executive Agency increasing the autonomy of its daily operations.

Similarly seeking to encourage thrifty and responsible financial behaviour amongst those without the financial wherewithal to attract the attention of other banks, the first trustee savings bank was established in 1810 in Dumfriesshire. Those contributing deposits received shares in the bank, which could not be traded on the stock market and which carried no voting rights or any ability to control the direction or the aims of the Trust. Directors were appointed as trustees on a voluntary basis.

During this period bank collapses were commonplace, and hence in order to build confidence in these institutions a key characteristic of these savings banks was that the nominal value of all deposits plus any interest they had accrued would be fully guaranteed. The necessary way to ensure this was to require that those deposits were invested in securities with a similar guarantee, resulting eventually in legislation (such as the Savings Bank England Act, 1817) compelling all deposits held by savings banks (other than that needed for day-to-day liquidity) to be handed over to the National Debt Commissioners at the Bank of England.

TSBs became extremely popular institutions, and remained focused on the management of low-volume deposits.[20] Increased competition for deposits and the growing demand for chequing facilities to pay utility bills eventually resulted in regulatory reform of the TSBs allowing them to offer their first current accounts in the 1960s, albeit without overdraft facilities.

Central regulation designed to ensure that savings banks would remain a completely safe option for depositors limited further diversification into the business activities of the clearing banks. Only in 1975 were legislative reforms introduced that would allow the TSBs to provide the same services as the clearing banks including the ability to loan money and to invest their funds in a wider range of securities, although this also

[20] Attempts at market diversification were ended by the Savings Bank Act of 1891.

required rapidly reducing the number of independent TSBs, concentrating them into independent regional banks operating under a central overseeing authority.

This diversification into full retail banking was relatively unsuccessful, failing to attract substantial numbers of borrowers, and in 1984 the TSBs were incorporated as a single organisation. Consequently the umbrella organisation lost its special corporate status and was later floated as TSB Group plc on the London Stock Exchange. The unusual relationship between the depositors, the trustees and the government had created considerable disagreement over the rights to the accrued capital, finally resolved with new entity retaining the proceeds from the listing. TSB Group plc would later merge in 1995 with Lloyds Bank, one of the UK's biggest clearing banks.

Why did the savings banks disappear, and could we bring them back?

Once we understand the history and significance of these 100%-backed savings banks, the views of Fisher take on a different hue. He was not proposing overthrowing the entire banking system to replace it with an eccentric and unproven alternative envisaged in an academic's study. Rather, he was proposing that a very significant component of the depository system (for example, between the two World Wars, the trustee savings banks were collectively as big as any of the four main London clearing banks) become the dominant component.

Indeed, understanding this history places the UK tradition of having no state deposit insurance for the main clearing banks again in a different context. If you wanted fully insured deposits, you could place your money into a savings bank. If you were placing your funds into a clearing bank, attracted by higher interest rates or more elaborate associated services (for example, cheque withdrawal was not available through the trustee savings banks until 1965), then you were clearly choosing to take a risk — you were an investor or a payment services-purchaser, not a mere saver.

It might be tempting to believe that we should simply restore the kind of structure that existed in the UK before 1979: if you wanted your deposits to be safe, you placed them in a savings bank at a low interest rate; if you wanted to obtain higher deposit interest rates but take some risk, you placed them in a fractional reserve bank. So there was choice and competition.

Tempting though this might be, there are a number of reasons to think it might not be credible. First, even with this industrial structure, in the Secondary Banking Crisis of the early 1970s, the regulatory authorities intervened to protect the fractional reserve banks. One factor here might be a form of rational herding: if a high enough proportion of deposits are in fractional reserve banks, then it might be rational to believe that

regulatory authorities will not allow depositor losses in fractional reserve banks, and hence rational to place deposits in fractional reserve banks even if one did not wish to take risks.

Next, the regulatory response to the Secondary Banking Crisis (*inter alia*) resulted in high inflation from the mid-1970s to the early 1980s. At high inflation rates the real returns on government bonds become very low (even very negative) and depositors in savings banks make large real terms losses — larger than those in fractional reserve banks in which higher interest rates were paid. (Of course the opposite is true in periods of high deflation — such as the heyday of the savings banks in the 1920s and 1930s.) There is thus the risk that savings banks would be naturally eliminated following periods of high inflation (as happened in the UK in the 1980s).

Now, in periods of low inflation with occasional deflations – periods much more likely to be associated with fractional reserve bank failures – it will become attractive to re-establish savings banks. But there is the risk that, because of the rational herding point above, if too high a proportion of deposits are in fractional reserve banks, depositors will not believe that it is credible that the regulatory authorities will allow fractional reserve banking deposits to incur losses, and so incentives to move monies into savings banks will be diminished.

This factor may be particularly acute given the natural barriers to switching banks.[21] That might make it seem attractive to consider structures in which one could choose between savings deposits and fractional-reserve deposits within the same institution (as we shall do in the next section).

Next, there is a widespread view that depositors cannot reasonably be expected to understand anything of the activities of banks. There are those that would regard such a view as patronising and implausible infantilisation of the consumer, and claim that insofar as there was anything in it at all it could surely be mitigated by regulation forbidding any bank that was not 100%-backed from calling itself a "savings bank". But whether or not such a response would be justified, the view appears to have so entered the public consciousness in terms of the financial services sector that it would be difficult to expunge. The consequence of the view would be that depositors would have no idea whether or not they were placing money in a 100%-backed bank, and so would need protection even if they were depositing in a fractional reserve bank.

Finally, there is the idea that some consumers might have restricted access to banking services — they wish to deposit at a local branch, and if there is no local savings bank available they might feel obliged to deposit

[21] There is an old joke that the British change their spouses more often than their banks.

in a fractional reserve bank even if a savings bank were what they really wanted. This might be especially true if too small a proportion of consumers actually wanted savings bank services for it to be commercially viable to establish a savings bank in a particular locale. Indeed, such reasoning was precisely one of the motivations for the establishment of the Post Office Savings Bank (NS&I). Again, there is a counter-view that it is implausible that in an era of internet banking one's banking is really so constrained by locale. But, as above, the view has achieved such political profile that it might be difficult to expunge. The consequence might be that it is more attractive to ensure that savings-bank-style deposits were available wherever there are fractional reserve banks, rather than relying upon savings banks to be established in multiple locations. (Again, this is a feature of our proposal in the next section.)

We shall now turn to our own proposed alternative structure for deposit regulation, which will have a modernised version of the traditional fractional reserve bank/savings bank industrial structure, but respond to a number of the weaknesses discussed above, where instead of choosing to place one's funds in a 100%-backed *institution* (viz. a savings bank) one instead places them in a 100%-backed *account* — a "storage deposit".

4) A more modest alternative: the division between storage and investment deposits

Given the arguments above, it can be seen that there is a challenge. Deposit insurance is financially destabilising and incompatible with private capitalism in the form we have understood it for centuries (as involving privately owned banks engaged in fractional reserve banking). But, at the same time, there appears to be a political imperative requiring depositors to be protected by the state. Narrow banking (ending fractional reserve banking) would address the liquidity issue, but would forego the gains from the leveraging of resources (and hence increased economic activity) supported by fractional reserve banking, and might in fact promote pro-cyclicality in credit rather than mitigate it. It would also entail significant transition costs of switching systems (since it would involve the overthrow of much of the current financial system) and would restrict freedom of contract (if some people want to place their deposits in fractional reserve banks and there are banks that want to accept those deposits, one would require a strong reason for interfering with their freedom to trade). So perhaps it might be desirable to have a system that incorporates some of the strengths of the 100%-backed banking structure – in particular, 100%-backed deposits – but that allows coexistence between 100%-backed deposits and ordinary unbacked (and uninsured) fractional-reserve-supported deposits. One way to do this might be to have a system in which fractional reserve banking coexisted with extensive 100%-backed banking, but it might not be credible to promise not to insure fractional reserve bank deposits under such a structure.

Our proposal addresses all parts of this problem. It has four components, are explained in more detail below:

- Every bank licensed to accept retail deposits is required to offer a form of pure "storage deposit" account. (This is a form of nested 100%-backed bank within a standard "wide" bank);
- Holders of investment sight deposits become preferred creditors;
- No investment deposits are insured by the state. All (100%) of storage deposits are insured by the state. One chequing account per person (the account into which salaries are paid) is insured, at 100%, to a limit (a reasonable current value would be £10,000); and
- As part of the special administration regime for banks, in the event of a bank being placed in administration, investment depositors would be able to withdraw their money as normal but such withdrawals would constitute a form of borrowing from the state.

To understand the idea here it will help if we consider the overall scheme, first from the side of consumers (depositors), then from the side of the banks.

The concept from the consumer side is that those depositors wanting a no-risk storage form of bank deposit account should have one available at every bank. Such deposits would offer very low interest rates, but would be as close to perfectly risk-free as any government can deliver. If a depositor wanted a higher interest rate, she would need to move her money out of a storage deposit account into an investment deposit account. Investment deposits are intrinsically subject to risk. They offer higher interest rates if all goes well, but if the bank fails then they are not insured. However, they are the highest ranking claimants on the assets of the bank apart from the taxman and wages. Furthermore, in the event that the bank fails, the consumer would be able to withdraw deposits as normal, but such withdrawals would be loans from the state. If, upon liquidation or sale, the assets of the bank were not sufficient to cover deposits fully (which would be unlikely under our structure, but possible), then depositors that had withdrawn all their money might end up owing money to the state, of a form in some ways analogous to a back-tax debt. In addition, so that concerns about banking stability do not threaten the payments system (e.g. by encouraging people to start being paid in cash), the state would guarantee the balances of one chequing account (that into which salaries are paid) up to a limit (say, £10,000 at present).

From the side of the banks, the concept is that storage deposits should be fully backed by gilts (and/or other highly liquid low-risk assets) and legally isolated within the bank's balance sheet. Storage deposits cannot be employed in fractional reserve banking (e.g. to meet regulatory capital requirements) — the money taken in such deposits is not loaned out to consumers or businesses; it is simply used to purchase government bonds. As matters currently stand, banks are subject to what are called "Tier 2" regulatory

capital requirements, intended to provide a buffer of capital before depositors lost money, in the event that the bank failed (this is sometimes called "gone concern capital"). But under our scheme this would be superfluous as storage deposits would be fully gilt-backed and investment deposits would be preferred creditors, so Tier 2 capital requirements could be abolished.

Exploring the elements

Every bank licensed to accept retail deposits is required to offer a form of pure "storage deposit" account

This is the proposal that anyone entering any high street bank should have the option of placing deposits in a 100%-backed account, legally ring-fenced within the overall balance sheet of the bank. No-one could therefore reasonably claim that she had no option but to place money in a fractional reserve bank deposit account, thus undermining one source of moral pressure for ex post deposit insurance of the sort observed in 2007-8.

Interest paid on these accounts would be very low. One model would involve them paying out the gilt rate minus a management fee (in basis points). Indeed, under certain circumstances it is plausible that depositors would pay the bank for the privilege of storing their money in these accounts.

Regulation would obviously be required to ensure that banks conducted themselves in such a way as to make a genuine offering of these accounts. One part of that regulation would presumably be a maximum basis points differential between the gilt rate and the storage deposit interest rate.

It is interesting to note that the option of placing funds in a storage deposit account would be an option for those moving house with a temporary period in which a large body of funds sat as cash. A common concern about caps on past deposit insurance schemes has been that these do not make adequate provision for those simply storing their housing funds in this way. A storage deposit account would be the natural home for such funds.

Holders of investment sight deposits become preferred creditors

If you leave your suit at a dry-cleaner's you continue to have legal ownership of the suit, even though possession has passed to the dry-cleaner. Similarly, if you take your car to a garage to be repaired, you continue to own the car even though the garage has taken possession of it. A transfer of possession of property where legal ownership of property remains unchanged is known as a "bailment". Many depositors

in fractional reserve banks appear to dwell under the misconception that depositing money is a form of bailment — they believe that they remain the legal owners of their deposits.[22]

But this is simply not so. Since the landmark Carr vs Carr case of 1811, it has been established case-law within the UK that depositors in fractional reserve banks do not have legal ownership of their deposits. Instead, in depositing money we *lend* it to the bank, and the bank pays us interest on the loan. As creditors, if the bank is liquidated, depositors must take their place in the queue of claimants on the liquidated bank's assets.

Under the insolvency framework as it exists post- the Enterprise Act 2002, depositors do not have preferred creditor status. That is to say, as a class they rank equal with bondholders and below preferred creditors such as salaried staff and the tax authorities. But in many jurisdictions (e.g. Switzerland[23]), depositors themselves constitute a class of preferred creditors. We propose that investment deposits should carry preferred creditor status, at least insofar as they are "sight" deposits (sometimes also known as "demand deposits"). These are funds available for withdrawal upon demand, without notice or penalty. In contrast, "time deposits" cannot be withdrawn for a certain period of time (or can only be so withdrawn upon payment of a penalty).[24])

To see the significance of this proposal, consider the context of 2008 in the UK. Increased dependence on wholesale funding had led to many banks having assets much larger than their deposits. Most of the difference was covered by wholesale funding — bonds. At the peak of the gap, the total assets of Northern Rock were over twice the deposits[25] and those of HBOS nearly twice[26]. If depositors had been preferred creditors, then in order for depositors to lose money as a consequence of a bank's entering liquidation, not only would all the equity have to be eliminated by losses, but also all the bonds.

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[22] In a recent ICM poll commissioned by the Cobden Centre, 74% of respondents believed they remained the legal owners of the money they deposit in their current accounts, whilst a further 16% believed that they shared ownership with the bank.

[23] See http://www.einlagensicherung.ch/en/home.htm

[24] There would be a case for making short-term time deposits preferred creditors, also. We shall not expand upon this detail further here.

[25] Yorulmazer, Tanju (2009), "Liquidity, Bank Runs and Bailouts: Spill-over Effects during the Northern Rock Episode", *Federal Reserve Bank of New York.*
http://www.econ.washington.edu/user/plbrock/Yorulmazer2008.pdf

[26] "The downturn in figures", BBC News website, 18 Febuary 2008.
http://news.bbc.co.uk/1/hi/business/7250498.stm

In practice, it is very implausible that this could happen. In the bank runs of the 1930s in the US, when depositors did not have preferential creditor status[27], typical depositor losses were less than 20%.[28] For banks — regulated entities required to hold adequate capital — to turn out to be insolvent to the tune of 50% and more of assets would have been extremely unlikely under the 2007-8 scenario.

Nonetheless, it is not impossible that future developments might one day lead to larger losses for banks — almost by definition, the next crisis is unpredictable — and it is also perfectly plausible that in the future the proportionate dependence on bond funding as opposed to deposits funding will decline. That would mean that the bonds buffer for depositors would be less.

Thus, investment deposits would carry genuine risk — as they should.

Since this proposal would involve a radical change in the capital structure of banks and, if introduced overnight, would involve the negating of most current bonds contracts (because if depositors because preferred creditors they would rank ahead of bondholders that entered into contracts believing they had security), it would obviously be appropriate to phase in the introduction of this measure over an extended period.

Investment deposits would presumably offer higher interest rates than storage deposits, since the funds would be employed for standard fractional reserve banking purposes — lent out for commercial loans, mortgages, consumer loans, and so on, or invested in stock markets or derivatives or all the other investment activities of standard universal banks.

Accounts that are and are not insured by the state

Our proposal is that:

- No investment deposits are insured by the state;
- All (100%) of storage deposits are insured by the state; and
- One chequing account per person (the account into which salaries are paid) is insured, at 100%, to a limit (a reasonable current value would be £10,000).

It should be clear why we propose that investment deposits should not be insured whilst storage deposits should be insured. The undesirability of insuring investment deposits was discussed in the early sections of

[27] Saunders, Anthony and Wilson, Berry (1996), "Contagious Bank Runs: Evidence from the 1929 – 1933 Period", *Journal of Financial Intermediation*, Volume 5, Issue 4, pp 409 – 423.
[28] See Friedman & Schwartz, *op. cit.*

this note. Our structure adds the feature that anyone choosing to make investment deposits should be clearly advised that their deposits would not be insured by the state (there might, of course, be private sector insurance arrangements) and were thus in principle at risk.[29] If you have chosen to invest in an investment deposit when you could have placed your money in a storage deposit, then you were unambiguously an investor, and it is to be hoped that therefore taxpayers would not feel tempted, ex post, to insure your investments against losses in the unlikely event that they go bad.

State insurance of storage deposits may seem superfluous. After all, they are already 100% backed. However, there would remain the possibility of fraud or of the regulatory authorities failing in their duty to ensure that there was indeed 100% backing. The state guarantee simply addresses these risks.

Finally we come to the chequing account. The function of this insurance is to sustain the payments system. It would be undesirable if, in a financial crisis, concerns about the robustness of banks led people to cease to use bank transfers to receive their salaries. We therefore propose that the chequing account into which salaries are paid should be insured up to a value of £10,000 — adequate, we believe, to provide scope for almost all employees to receive their monthly salaries without resorting to special measures. At the time of writing the median salary of those aged 20-64 is around £1,800 per month, which equates to a post-tax monthly salary of around £1,200 per month.[30] Much less than 1% have salaries above £10,000 per month post-tax[31] — presumably those with such high salaries could make special arrangements to have funds transferred directly into storage deposit accounts if necessary.

Deposit access arrangements

Banks will, in the future, have special administration regimes analogous to those of airports, the electricity grid and other essential utilities. Indeed, some moves in this direction have already occurred. A detailed discussion of these arrangements falls outside the scope of this note.

However, as part of these wider special administration arrangements, we propose that depositors (including investment deposits) would be able to withdraw their money as normal but withdrawals from investment deposits would constitute a form of borrowing from the state.

[29] Obviously implementation of this proposal would require amendment of certain EU directives. We shall not pursue this point in more detail here.
[30] http://www.hmrc.gov.uk/stats/income_distribution/3-2table-jan2010.pdf
[31] In 2007/8, after tax income at the 99th percentile was £103,000. See http://www.hmrc.gov.uk/stats/income_distribution/menu-by-year.htm#311

The motivation for this element to our proposals should be clear. Historically, when banks have failed the key concern for depositors has not been that they would lose their funds. Rather, it was that they would lose *access* to their funds, perhaps for years. Even in the bank runs of the Great Depression in the US, typically recovery rates for depositors ultimately exceeded 80%.[32] The problem was that it often took some years before wind-up of the bank delivered the funds, and in the meantime depositor were unable to pay the mortgage on their houses and farms and went into bankruptcy themselves.

By granting depositors access to their funds in special administration, the problem of depositor liquidity is removed.

In the event that liquidation followed and the depositor did not ultimately recover as much of her investment deposit funds as she had withdrawn in the meantime, then she would owe monies to the state — just as if she had an unpaid tax bill. (Storage deposits would, of course, be 100% guaranteed.) Thus investment deposits would not present liquidity risk, though they would still offer a theoretical risk of loss — this risk is genuine and important.

Advantages

Our proposal offers a number of important advantages over either the status quo or the 100%-backed accounts alternatives. In particular:

- It allows for the credible removal of deposit insurance from fractional reserve banking deposits. Fractional reserve banking is an intrinsically risky activity. As we have discussed, to guarantee deposits that are used in intrinsically risky ways is destabilising and implies the use of very invasive restrictions on the activities of banks — restrictions that it would be desirable to avoid, if feasible. We believe that it would be credible to remove deposit insurance from investment deposits under our scheme, in a way it would not be credible to simply remove insurance from the market as it stands, because under our scheme people choosing to place their money in investment deposits have transparently turned down an insured alternative, choosing to be investors, not simply storers of their savings;
- Nothing is truly riskless, of course. Even if storage deposits were 100% backed by government bonds, there would remain the (unlikely) possibility that the government would default on its debts. The use of index-linked bonds backing could provide some protection against inflation, but even that might be imperfect in respect of real returns. But, overall, our proposal grants to depositors some scope to choose a risk-return-liquidity trade-off that better suits them. If they

[32] See Friedman & Schwartz, *op. cit.*

want to take some risk by placing money into investment deposits, they can — regulation does not prevent them. Furthermore, because our proposal cuts across and renders superfluous the idea of separating retail from investment banking, investment deposits would presumably be available that paid higher interest than under the retail/investment bank split (investment banking activities would be likely to be higher return, and so the interest rates paid on investment deposits would be higher in banks that engaged in investment banking);

- Our system allows for the continuation of fractional reserve banking. Under the 100%-backed banks schemes, fractional reserve banking ends. We believe that forbidding those that want to place their funds in investment deposits when there are those willing to accept such funds, if it were credible not to provide implicit state insurance of those funds, would be an undesirable restraint on trade and liberty. The foregoing of mutually advantageous trade of this sort would be economically damaging, in both the short- and longer terms, reducing output and foregoing growth; and
- To achieve the credible removal of deposit insurance, our system does not require that a high proportion of deposits are actually made in 100%-backed accounts or institutions. This is in contrast to the idea of restoring the two-institution (savings bank/fractional reserve bank) industrial structure that existed before 1979, which we believe would rely for its credibility on achieving a high proportion of deposits being located in savings banks. Our concept is paedagogical as much as restrictive — that is to say, its key function is to educate ordinary retail depositors in investment accounts that they are lending their money to banks when they deposit in fractional reserve accounts, not simply storing money there. With a one-institution/two-account structure, it is (i) so straightforward to make storage deposits, given their universal availability; (ii) so easy to move money from investment deposits into storage deposits (because they are within the same institution); and (iii) so clear that investment deposits are investments ("the clue's in the name") and are at risk (given the warnings required before accepting investment deposits) that we believe consumers and politicians would be much more likely to accept downside risk.

Drawbacks

The key drawback is the following: one creates a new and potentially aggressive form of bank run that risks being every bit as destructive as traditional bank runs. Imagine a crisis scenario. Those in banks that were risk-averse or poorly informed, but had investment deposits, might well prefer to shift their funds into storage deposits. In the absence of regulatorily-imposed obstacles, this could well be an easier and quicker process than moving deposits out of one bank into another — in this case one is merely switching between accounts. So concerns about a crisis could lead to a massive shift of deposits out of investment deposits into storage deposits, destroying the deposit base that supported the fractional reserve banking and causing the

fractional reserve entity within the bank to experience serious liquidity problems. (Indeed, as noted earlier, even under the current system, despite the challenges of switching between banks and even given deposit insurance and the assurances of governments, there was an 11% rise in deposits in National Savings and Investments (the last significant savings bank in the UK) in just two months in late 2008.)

It might not be straightforward for regulation to either impose or allow delays to such transfers. After all, under normal circumstances we are forcing banks to be accommodating to those that wish to place their funds into storage deposits instead of investment deposits. How would we know that we needed to reverse these requirements until we had witnessed an investment deposits-to-storage deposits run? Goodhart's objection to narrow banking in general would apply to apply particularly strongly to this form of financial architecture.

We have, of course, limited the incentives to do this, through our establishing of depositors as preferred creditors and through our deposit access regime. But perhaps it would occur anyway. To which the appropriate response might be that such a switch is in fact efficient and appropriate, not the damaging process implied. For what are we saying? We are saying that in a systemic crisis investors might choose to move out of risky investments into cash or quasi-cash in the form of storage deposits. They will indeed do that. They do that in respect of the stock market. Why should they not do it in respect of investment deposits?

Of course, as Goodhart's argument points out, the consequence is that borrowing becomes more expensive when there is a crisis. But we use macroeconomic levers to counter this — we reduce interest rates, we print money, we run government deficits. Is it obviously desirable to prevent re-allocation of investment capital as well? Insofar as such a bank run occurred with a robustly solvent institution, the central bank could provide last resort lending. So, we would have the possibility of significant bank runs — but that is the inevitable and ineliminable concomitant of fractional reserve banking. Bank runs are deterred and managed via last resort lending, according to the classical British no-deposit-insurance model. Our modernised version of the system does not seek to avoid bank runs — indeed, some movement of funds out of investment deposits and into savings deposits would be a healthy response to perceptions of rising risk and an important discipline on excessive risk-taking by banks.[33] Our system seeks, instead, to avoid the damaging effects of deposit insurance and to ensure that those that are genuinely savers, not investors, have the ability to store their money safely.

[33] Because of the low cost of switching between accounts, it is even possible that bank "runs" would become rather smoother (i.e. less concentrated) under our system, and hence less viscous (if less concentrated, it would be more straightforward for the bank to liquidate assets to deal with the run, and so it would not be reduced to dependence on central bank liquidity).

A second potential "drawback" relates to the preferred creditors regime. We would envisage depositors being senior to any bondholder, whether secured or not. This would mean that the collateral comfort offered by secured debt would become more limited for banks. A consequence might be that there would be markedly less use of bond finance by banks. Whether that would really be a drawback or a boon is a matter of debate.

5) Conclusion and Recommendation

This paper has argued that deposit insurance in a fractional reserve banking system is economically damaging and financially destabilising, but, under the financial structure currently common, appears politically impossible to avoid. We have suggested that restricting deposit-taking to 100%-backed deposits, whether in the form of narrow banks or limited purpose banks, would be very disruptive for the financial sector, entail large transitional costs, and would lose the potential gains from trade between those that wish to supply fractional reserve deposits and those that wish to accept them. We feel that a switch to only 100%-backed deposits goes too far.

On the other hand, 100%-backed deposits do exist in our system (NS&I) and used to be much more widespread (particularly through the trustee savings banks but also through the wider savings bank movement), comprising a significant proportion of total deposit-taking. Rather than trying to re-invent new 100%-backed savings banks, we propose nesting 100%-backed savings entities within all standard fractional reserve banks by requiring all banks to offer "storage deposits" (100%-backed savings deposits) as well as "investment deposits" (standard fractional reserve bank time and sight deposits). We propose removing all deposit insurance from investment deposits and restricting it to storage deposits, as well as enacting other technical elements of the scheme.

The key is not to find a no-risk vehicle for all deposits. The key is to make people understand that deposits that are not 100%-backed are at risk — depositing in such accounts is *investing* money, not simply *storing* it. But if people *do* wish simply to store their money, there should be straightforward institutions where they can do that reliably without undermining the wider stability of the financial system. We believe that if people can be made to understand that deposits that are not 100%-backed are investments, then it should be possible to return to the classical British structure under which there was an option of storing money for modest savings purposes, (what we call) investment deposits were available for more ambitious investment, and there was no deposit insurance at all in respect of investment deposits, but instead bank runs were deterred and managed by the central bank, particularly through last resort lending.

Our proposal here does not entail significantly restructuring the shape or number of financial sector institutions (by contrast with, say, the proposal to separate retail from investment banking), involves re-employing well-tested and long-established banking techniques (the savings banks) rather than radical new departures, and limits the need for aggressive and restrictive additional regulation of banking activities. It would nonetheless constitute a significant and profound change to the structure of practice in deposit-taking compared with the system that has evolved over the past thirty years, and is now seen to have failed.

Policy Exchange

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