Restoring prudent banking in Britain: evidence and policy*

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INTRODUCTION

1. The *a priori* case for prudential regulation of banks is to protect small depositors from insolvency (or the taxpayer if there is deposit insurance); and to preserve the public good of financial stability.
2. Prudential regulation for banks has been in place at least since 1930s. In the US, for example, the regulatory response of President Franklin Roosevelt to severe banking failure in the Great Depression included establishing the FDIC (to provide deposit insurance and monitor banks), Glass-Steagall legislation (to separate commercial and investment banking), changing the rules of the Securities and Exchange Commission (so as to increase investor protection), and adding Chapter 11 to the laws of bankruptcy. This set the 'rules of the game' for half a century – until the move to deregulation, beginning under President Reagan and continuing thereafter.
3. Financial deregulation in Britain, which began in earnest with the 'Big Bang' of 1986, may have added to the pressure which eventually made Glass-Steagall unsustainable in a regulatory 'race to the bottom'.
4. Substantial losses suffered by US banks on Latin American lending in the 1980s, however, led to a search for internationally accepted baselines for prudential regulation. The outcome was the Basel Accord of 1988, which set a minimum capital requirement of 8% of total risk-weighted assets on individual banks, and led to substantial recapitalisation of the international banking sector.

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A. EVIDENCE

Failed regulatory oversight prior to the crisis of 2007/8

5. The granting of operational independence to the Bank of England in the Act of 1998, so as to achieve a mandated target for inflation, was accompanied by delegating bank supervision to the FSA with mandate for a 'light touch regulatory system' (as it was later described by Gordon Brown in the 2006 Mansion House Speech). The Treasury report on financial regulation confirms that 'the FSA's approach to micro-prudential regulation was flawed. In the run up to the financial crisis, financial supervision relied too much on 'tick-box' compliance with rules and directives at the expense of proper in-depth and strategic risk analysis.' HM Treasury (2010, p.4)
6. Internationally, Basel I gave way to Basel II in 2004 by a process which has been described as one 'in which the committee sought to protect itself as far as possible from criticisms in the banking industry, finally ending up allowing the major international banks to determine for themselves the manner in which they would be supervised' J-C Rochet (2010, p. 81). To be blunt, there was 'regulatory capture'.
7. These developments enabled banks to take on unsustainable risks while ostensibly playing by the 'rules of the game'. The demise of **Northern Rock**, a mortgage mutual company that had become a bank, is presented as a case in point in Dewatripont et al. (2010, p.87). The facts of the case are briefly as follows:

   With a balance sheet of over £100 bn and an equity capital base of £2.2 bn, Northern Rock reported risk-weighted assets of only £19 bn. The corresponding prudential requirement was less than this, £19x0.08 = £1.52bn., so the bank was able to justify a handsome dividend distribution to shareholders only a short time before a bank run led to nationalisation and a capital injection of £23 bn of tax-payers' money (more than one and a half percent of UK GDP).

Excessive risk-taking by High Street banks and mortgage companies

8. Not only were two mortgage-companies-turned-banks fully nationalised after losses on property lending, in addition, the government has had to take substantial involuntary holdings in two High Street banks following their loss-making acquisitions, as follows:

   During 2007, after the peak of the property boom, **RBS** went head-to-head with Barclays in a battle to acquire the Dutch Bank ABM-AMRO. In Oct. 2007, RBS finally gained the sub-prime laden crown, but promptly recorded a loss of approximately £20 billion on the transaction (i.e. almost 1.5% of GDP). Fears of banking collapse led to repeated capital

injections of public money, giving the government an ultimate stake of 84% of RBS equity. (The British Government was credited with successfully pioneering this form of bail-out, later to be used in the US.) As the bank was not fully nationalised, however, non-deposit bond-holders were protected from the losses suffered by the shareholders.

In September 2008 **Lloyds Bank** was in talks to take over HBOS – known to have heavy exposure to property. With the then Chancellor of the Exchequer helping to facilitate proceedings, the take-over was completed in early 2009: but Lloyds Banking Group, as it was now called, was soon to reveal a pre-tax loss of £11b on the take-over. Once again an official injection of capital was called for to avoid collapse; and the government wound up with a 41% stake in another High Street Bank.

9. In fact, according to the US Treasury Secretary's account of the demise of Lehman Brothers, the number of High Street banks on life support nearly became three, as described below:

In September 2008 **Barclays Bank** was in last-minute negotiation with Hank Paulson, Secretary of the US Treasury, to save Lehman's from imminent bankruptcy, at a time when Lehman's was thought to be insolvent with a hole of $10b in its accounts. Once again Barclays' ambition for acquisition was curbed, this time by the direct intervention of Chancellor of the Exchequer who, according to Paulson (2010, pp. 211-12), 'made it clear that there was no way Barclays would buy Lehman. He offered no specifics other than to say that we were asking the British government to take on too big a risk, and he was not willing to have us unload our problem on the British taxpayer.' Though the Treasury Secretary was disappointed not to find a saviour for the troubled US investment bank, he recognized that 'It was understandable that the country's [i.e. the U.K's] officials might be reluctant to waive normal shareholder procedures for a deal that could have resulted in big losses to one of their largest institutions while carrying no risk for the U.S. government.'

(Buying parts of Lehman *after the firm went bankrupt* proved a good deal more profitable for Barclays: and the mastermind behind this was in fact awarded a total remuneration package of about £40 million in 2009 – more than 200 times the salary of the Chancellor of the Exchequer. Subsequently, in 2010, he has been nominated as CEO of Barclays, which, as a leading clearing bank, has a balance sheet about as large as UK GDP.)

10. The portfolio of failed banks of the UKFI now includes two mortgage banks nationalised with zero compensation for shareholders (Northern Rock and Bradford & Bingley); and two major High Street banks, LBG and RBS, in which as a result of injecting capital the state has acquired 41% and 84% of equity.

11. According to the Bank of England Financial Stability Report (2009, June, p.20) the total figure for capital injections to banks and special purpose vehicles from 2007-2009 amounted to £60 billion, more than 3% of GDP. But the total increase in public sector support to the financial system in this period, in this and other forms such as guarantees, was reported as £1.26 trillion, or 88 percent of GDP.

Substantial and growing market concentration

12. Markets for financial services in UK are highly concentrated. Evidence of this is provided in ICB (2010, section 3.11)) where the market shares of the top 5 banking groups in the markets for each of personal current account, residential mortgages and SME banking are calculated as 85%, 82% and 91% respectively. Paul Woolley (2010, p. 124) warns that this can lead to excess profits: 'It is well known that financial intermediaries can extract rents by exploiting monopoly power through some combination of market share, collusion and barrier to entry.' Evidence of a sharp rise in the profitability of banking in the UK is provided by Haldane et al. (2010), where, using conventional measures of Gross Value Added, it is reported that:

> 'In 2007, financial intermediation accounted for more than 8% of total GVA, compared with 5% in 1970. The gross operating surpluses of financial intermediaries show an even more dramatic trend. Between 1948 and 1978, intermediation accounted on average for around 1.5% of whole economy profits. By 2008, that ratio had risen tenfold to about 15%.'

High and rising rates of profit in banking prior to crisis imply that the benefits of interbank competition accrued to bank shareholders and employees and not to bank customers. So too does the use of wider margins (between loan and deposit rates) to recapitalise banks after the crisis.

13. Banks have been subject to substantial public policy intervention in the 21st century, following several inquiries into their operations and practices. Cruickshank (2000) proposed, inter alia "A strengthened policy framework to increase transparency in banking supervision, eliminate regulatory distortions and prevent anti-competitive mergers within the banking industry whilst retaining prudential regulation. To help achieve this, the report calls for the FSA to assess in its annual report the level of competition within the banking industry."

14. Nevertheless, the more far-reaching conclusions of this report appear not to have been followed through, in particular regarding personal accounts. A more recent Competition Commission report on Personal Banking in Northern Ireland (CC, 2007) found significant evidence of a lack of transparency in charging and imposed by Order a number of recommendations to improve the situation.

Mis-management of Innovation

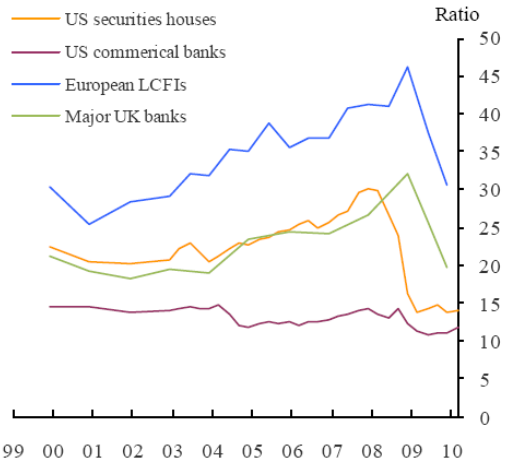
15. The failure of securitised assets to live up to their ratings can be attributed to the mismanagement of innovation. ‘To use a rather simplistic but nonetheless expressive metaphor, the recent financial crisis can be thought of as the Chernobyl of securitization. The use of a relatively new technology under poorly managed conditions led in both cases to a major catastrophe.’ Dewatripont et al. (2010, p.94).

Market failure: distorted incentives and externalities

16. As argued in Haldane et al. (2010), the measured contribution of financial sector to GDP has been over-stated – the reason being that the rates of return used are not corrected for risk. They suggest an adjustment to allow for risk, and report that ‘according to simulations on the impact of such an approach for the Euro-zone countries, aggregate risk adjusted [value added] would stand at about 60% of current aggregate [value added] for Euro-zone countries over the period 2003-7.’ Applying this correction to the gross output of the UK banking sector, reported by them as £15 billion net of fees and commissions etc., would imply a sum of £6 billion, i.e. half percent of GDP, as a transfer to the banking sector. Such a transfer may provide a crude measure of distorted incentives in the banking sector, which lead to excessive risk-taking. This is a flow which will continue as long as banks are able to make excess profits. (Capitalised at say 3%, it would amount to some 17% of GDP.)

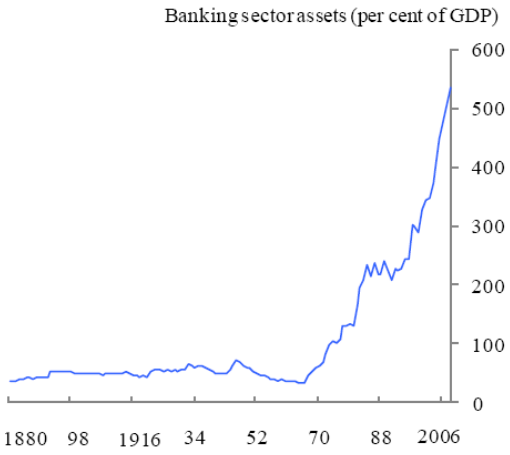
17. The high leverage characteristic banking in Britain (and elsewhere) implies the risk of significant ‘fire-sale’ and ‘network’ externalities within the financial sector; and the chart shows leverage for major ULK banks rising from around 20 times to 30 times over the period from 2002 to the crisis of 2008/9. The size of the banking sector relative to GDP implies that these externalities are also likely to impact on the economy as a whole: the rationale for the extraordinary support extended to the financial sector was to limit such ‘knock-on’ effects. The chart shows that the rapid growth of banking relative to GDP in the last quarter of a century: in the period from the liberalisation that began in 1986 until the crisis, UK bank balance sheets have expanded from two times to more than five times GDP.

Chart 24 Leverage at the LCFIs[a]



Sources: Bloomberg, published accounts and Bank calculations.
(a) Leverage equals assets over total shareholders equity net of minority interests.

Chart 19 Size of the UK banking system[a]



Sources: Sheppard (1971) and Bank of England.

(a) The definition of UK banking sector assets used in the series is broader after 1966, but using a narrower definition throughout gives the same growth profile.

18. Both distorted incentives and externalities can lead to systemic failure, resulting in substantial output losses, as the Governor of Bank of England notes:

> `The countries most affected by the banking crisis have experienced the worst economic crisis since the 1930s. Output is somewhere between 5% and 10% below where it would have been had there not been a crisis.' King (2010 p.2)

This loss of potential output is also a flow: how long it will continue is a hotly debated. (Capitalised, losses starting at 'between 5% and 10%' and falling to zero over seven years would amount to about a quarter of GDP.)

19. The final cost of the fiscal transfer made at the time of the bailout is important even though it omits the social costs of the market failure and externalities described above. Recent calculation for these fiscal transfers at the Bank of England are as follows:

> The narrowest fiscal interpretation of the cost of crisis would be given by the wealth transfer from the government to the banks as a result of the bailout… [in] the US, this is currently estimated to be around $100 billion, or less than 1% of US GDP. In the UK, the direct cost may be less than £20 billion, or little more than 1% of GDP. Haldane (2010, p. 3)

One reason for the surprisingly small figure in the UK - a one-off loss of about 1% of GDP - is that UKFI is trying to minimise them by raising the equity value of the banks in its care. Unfortunately this could involve promoting the very risk-taking strategies that led them to failure in the first place.

B. POLICY

20. The rapid expansion of banking in Britain (and the US) has been associated with increasing concentration, supporting the view that there are private benefits to increased size. But the risk of negative externalities also increases with size: that is why banks are deemed to be 'too big to fail'. A financial system that creates private incentives to increase negative externalities is destined to be crisis prone. Barclays' attempt to get a place on Wall Street by taking over an ailing Lehman (before bankruptcy) with the British taxpayer underwriting the risk is an egregious example. Another is the creation of structured products without taking account of risks to the wider financial system. What can be done to avoid this?

Prevention: an anti-trust perspective

21. The evidence shows that, for the UK, a major source of increased size and risk has been M&A activity: the disastrous takeover of ABN- AMRO by RBS is a case in point. But public policy can clearly play a role here, as two other cases show. First, Lloyds Bank was effectively encouraged to take-over an unhealthy HBOS – an error both for the bank and for society: better that HBOS had been nationalised like the other two mortgage companies. Barclays, on the other hand, was summarily prevented from acquiring Lehman's before it bankrupt - which must count as a merciful escape for the British taxpayer.

22. This suggests a role for a 'trust-busting' approach to financial companies. They could at least be subjected to the normal competition regime,[1] if not to a more stringent regime - as is the case for mergers in industries such as newspapers and other media. In addition, existing companies whose size is judged to pose excessive risks to society could be required to divest some of their business : as was the case for Roosevelt's approach to industrial capital in the 1930s.

23. Once this perspective is taken, other possibilities arise. It is widely believed that in the management of banks that combine investment banking and commercial banking, it is the former that carries the bigger stick. So why not make the divestiture help achieve functional separation? Some of the objectives of Glass-Steagall could thus be achieved as a result of anti-trust policy.

[1] Ministers in effect suspended by fiat normal operation of their own competition law in allowing Lloyds to take over HBOS.

24. Another possibility would be 'Financial Separation' which leaves the corporation intact[2], but could be used to hive investment banking off from commercial banking, with only the latter receiving deposit insurance. 'Living wills' for investment banking would be crucial to limit the effect of their risk-taking on the commercial arm of the business.

25. Support for such measures to reduce concentration is provided by Rajan(2010, p.172), who, in discussing how to keep institutions from becoming systematically important, argues:

> 'instead of imposing a blanket size limit on institutions, regulators should use more subtle mechanisms, such as prohibiting mergers of large banks or encouraging the breakup of large banks that seem to have a propensity for getting into trouble… Although there are always concerns about whether regulators will use these sorts of powers arbitrarily, they are no more difficult for legislators and courts to oversee than are powers based on anticompetitive considerations.'

Capital Buffers

26. Capital requirements are meant ensure that banks have 'skin in the game'. The case for strengthening capital buffers has been made forcefully by the Governor of the Bank of England:

> 'Banks should be financed much more heavily by equity rather than short-term debt. Much, much more equity; much, much less short-term debt. Risky investments cannot be financed in any other way. What we cannot countenance is a continuation of the system in which bank executives trade and take risks on their own account, and yet those who finance them are protected from loss by the implicit taxpayer guarantees'. King (2010, p.18)

As for Basel I, the increase in capital buffers had best be coordinated internationally. Where the Swiss have led the way[3], G-20 should not fear to follow.

Pre-emption and Resolution

27. There is evidence that 'prompt corrective action' procedures under the Federal Deposit Insurance Corporation Improvement Act 1991, have had beneficial effects in the US. In the UK, the Banking Act 2009 created a Special Resolution Regime (SRR) to give authorities a framework for dealing with distressed banks and building societies. Here too, there is a case for international harmonization:

[2] Financial or Accounting separation leaves the corporate structure intact, but prevents the flow of information or funds between the designated entities.

[3] The Swiss central bank has required their two big banks to hold additional amounts of equity capital and loss-bearing contingent capital, taking their total holding of equity-like capital to 19%, compared with the Basel III standard of 7%.

> ‘A harmonized special bankruptcy regime should be established for banks involving prompt corrective action, lending the supervisory agency powers to limit the freedom of the bank’s senior managers (possibly removing them) and of shareholders (possibly expropriating them) *before* the bank is technically insolvent.’ Dewatripont et al. (2010, p. 112).

After bankruptcy, a key objective of such procedures should be to bail-in non-equity bond holders.

A strategy for regulatory reform

28. We end with a heuristic discussion of options for the reform of the UK banking system, distinguishing in particular between reforms related to structure of banks (the degree of leverage, for example) and those related to markets (such as the degree of concentration). For this purpose, we work in Figure 1 with minimum capital requirement on the vertical axis (to represent variations in bank leverage), and market concentration on the horizontal axis (acting as a proxy for franchise value, assuming that high concentration implies high franchise value). Details are provided in Miller et al. (2010), attached as ANNEX A.

29. As noted above, capital requirements are expected to reduce risk-taking by banks because they will have ‘skin in the game’. It is also argued that monopoly rents will act in the same way, so long as losses lead to bank closure. So, in terms of preserving prudence in banking, there is a trade-off between official capital requirements and franchise value: if banking becomes more competitive, the minimum capital requirement will need to be raised to ensure prudence. This explains why the ‘No-Gambling Frontier’, LNR, which defines the conditions for safe banking, slopes upward from N to L.

30. This trade-off changes radically, however, once there is a prospect of official bailouts. In a concentrated banking system where big banks are deemed ‘Too Big To Fail’ the incentive to take excessive risk is no longer checked: they can take the upside, and pass the downside to the tax-payer. Taking this factor into account will of course greatly reduce the likelihood of prudent banking, as the effect of ‘franchise values’ in checking gambling is offset by the expectation of bail-out.

31. In circumstances like these, where banks can, so to speak, have their cake and eat it, the likelihood of banks behaving prudently is sharply reduced. The region for prudential banking

becomes U-shaped - as indicated by the shaded area bounded by LNR - the No Gambling Frontier - in the Figure.[4]

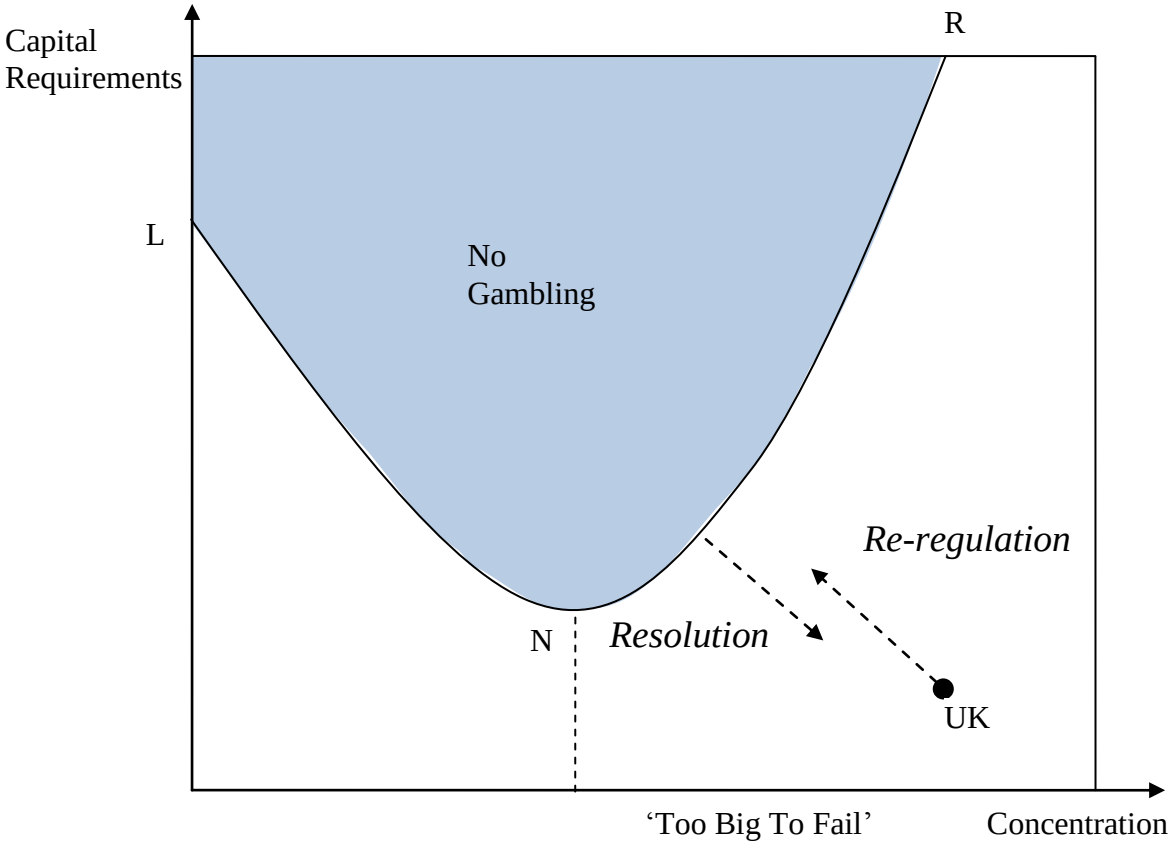


Figure 1. The U-shaped No-Gambling Frontier

31. Policy implications for policy reform in the UK may be discussed heuristically using the figure. To start with, it is clear from the evidence that, given the present level of capital requirements, high levels of concentration in the UK do not ensure prudent banking - quite the contrary. This is suggested by locating the UK in the bottom right of the figure. What of reform? Take first the need to reduce leverage, as stressed by the Governor of the Bank of England, King (2010): this can, broadly speaking achieved by increasing capital requirements - preferably on unweighted assets, to limit gaming of the rules.

32. As for market structure, the evidence suggests that risky M&A earns the perverse privilege of increased access to state bail outs (compare the High Street banks with the mortgage banks now under intensive care in the UKFI): this provides a powerful argument

[4] Let N be the lowest point of the U shape. To the left of this point, the risk of losing franchise value is sufficient to check gambling: to the right, however, the probability of bailout for banks Too Big To Fail offsets monopoly rents and encourages gambling.

for reducing concentration, namely to limit gaming of the state! Together, these imply a shift to the northwest, as shown by the arrow labelled Re-regulation.

33. One reason why banks get bailed out is that their affairs are too complicated to be wound up promptly and efficiently under the normal rules of bankruptcy – Lehman Brothers for example had more than 600 subsidiaries when it filed for bankruptcy. Improvements have already been put in place in provisions for Special Resolution Regime: but to further reduce the moral hazard of bailout, King (2010), Rajan (2010) and others have proposed further steps , such as the requirement to provide living wills, one of the effects of which will be to 'bail-in' debt holders. If, as is intended, improved resolution procedures will increase the threshold which banks are deemed to be TBTF, this will shift the right hand arm, NR, of the No Gambling Frontier condition rightwards as shown by the arrow in the figure.

34. This whole discussion is, however, subject to an important caveat, namely that such regulatory improvements can be undermined unless draconian steps are taken to reduce the asymmetric information in the financial system. As Rajan (2010 p.152) observes:

> 'The problem of tail risk taking is particularly acute in the modern financial system, where bankers are under tremendous pressure to produce risk-adjusted performance. Few can deliver superior performance on a regular basis, but precisely for this reason, the rewards for those who can are enormous. The pressure on the second-rate to take tail risk[5], thus allowing them to masquerade as superstars for a while, is intense.'

35. As Rajan shows neither the traders (who use names such as IBG, 'I'll be gone if it doesn't work' to describe their derivative strategies), nor risk managers (who get fired for worrying about risk), nor the CEOs (who get promoted for taking big risks), nor the Boards and not even shareholders have the incentive to check tail risk. If asymmetric information is the problem, then transparency must be part of the solution – involving real time monitoring, together with Prompt Correct Action and changes in the law governing what is legitimate business practice in providing financial services.

36. Putting it bluntly, a properly functioning financial system cannot co-exist with widespread deception. This point is made forcefully in the CAGE working paper by Chatterji and Ghosal (2010): if contracts that prevent banks from stealing cannot be written, but there are bailouts which rescue banks from the threat of creditors withdrawals (i.e. 'bank runs'), then one would be better off without banks.

[5] i.e. the risk of large losses that occur so infrequently as to be very difficult to detect ahead of time.

37. Current conditions in Ireland and Iceland, together with the 'doom loop' and 'doomsday' scenarios sketched by Alessandri and Haldane (2009) and Wolf (2010), provide graphic warning of what can happen without decisive action to correct distorted incentives in a sector some describe as 'the brain of the modern economy'.

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