1

Banking in a market economy – the international agenda

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The central challenge of the programme for reforming the global financial system is to return banking to its rightful place in a market economy. Mainstream policymakers and bankers of all persuasions are surely united in this: that banking should not depend on a safety net from taxpayers. Those who most espouse the disciplines of capitalism — bankers and financiers — should live by them.

Banks of all shapes and sizes are levered, run maturity mismatches, lend to risky borrowers and are highly interconnected. The reform programme will moderate but not abolish this. So, like any business, banks can fail. But, unlike many businesses, they can fall like dominos, with big economic and social costs. All this — neglected for so long — is now again driving policy, thank goodness.

The solutions have to be international, global. We live in a world where capital can flow freely across borders. This is good for economic prosperity; and it is good for freedom. But,

together with a pronounced drift in Western economies towards relying on rules, it has made highly complex forms of regulatory arbitrage endemic — hence the desire among policymakers for a level playing field of strong minimum standards. For this reason alone, whichever capital city one sits in, the international reform programme is central. This piece gives my perspective on this work, being taken forward under the leadership of the G20-sponsored Financial Stability Board (FSB).

A generation or so ago, we could have relied upon separate regimes for banking and for securities markets. In that far-off world, banks extended and held illiquid loans, overseen by banking supervisors. And, in a largely separate universe, securities regulators policed the integrity of individual transactions and offerings on public exchanges served by specialist intermediaries. The growth of private markets — over-the-counter, derivatives, securitisation — and of banks as intermediaries in capital markets has changed all that, as the 2007—09 crisis cruelly exposed. The revolution, whether we like it or not, has been the fusion of banking and capital markets. Even the most limited forms of commercial banking involve hedging of customer business in interest-rate and foreign-exchange markets. Wholesale loans to medium-sized and large companies, loans that are syndicated and traded, lie in the intersection of commercial and investment banking. The solutions to the problems of global finance have to cover securities markets as well as banking.

In consequence, on top of the crucial and extensive repairs to existing regulatory regimes, the international reform programme has had to embrace three new elements:

- Solve too big to fail: resolution
- Simplify capital-market networks: central counterparties, and more
- Take a system-wide view: macroprudential

Fault lines in the old international regulatory regime for banks

Before reviewing the new world, it is worth pausing to recognise the fault lines in the regulatory regime for banks prevailing in the crucial decade or so during which the present crisis was brewed.

Five are worth dwelling on. Four affect the regime for capital, which, in terms of true ability to absorb losses, is set to increase perhaps by as much as an order of magnitude relative to risk-weighted assets, and the fifth concerns liquidity (or, rather, the lack of it).

Leverage ratios versus risk-asset ratios

Currently, it is a commonplace that risk-based capital ratios are deeply flawed – because the measurement of risk is inevitably flawed and, worse, exposed to abuses by bankers and their advisers. This is true. Leverage ratios offer a simple constraint on balance-sheet expansion.

Twenty-five years ago, it was a commonplace that leverage ratios were deeply flawed – because they gave bankers a strong incentive to book assets that were both more risky than the regulators had had in mind when they calibrated their leverage rule and riskier than the regulators and creditors could easily spot. This was, and is, true. It was why Paul Volcker, chairman of the Federal Reserve Board, suggested to Robin Leigh-Pemberton, governor of the Bank of England, in the mid-1980s that there should be joint work on a full-blown system of risk-based capital requirements. That led to the first Basel Capital Accord.

Looking back on the past 25–30 years, I conclude that both these commonplace judgements are true. But we do not need to choose. We need both a risk-based capital requirement and, as a backstop, a leverage limit. That is precisely what Basel III incorporates.

What is capital? Basel I's mistake

The state regulates and supervises banks because the social costs of bank failure exceed the private costs to equity holders, creditors and managers – so-called 'negative externalities'. And no one should doubt this after the current crisis. In consequence, the state steps in to establish, among other things, minimum capital requirements.

This regime barely functions if the instruments that count, for regulatory purposes, as capital do not, in fact, absorb losses in a going concern and so cannot keep a loss-making bank out of liquidation. Yet, tragically, that is exactly where we found ourselves. The first Basel Capital Accord opened a door to 'hybrid' instruments. Most of them – and, as the years passed, supervisors around the world permitted more and more of them – offered leverage to equity holders (and to managers holding equity options) but provided no protection to ordinary creditors outside insolvent liquidation.

Thus one crucial repair to the Basel Capital Accord is that, basically, only common equity will be counted as 'core' capital by bank supervisors in future.

The measurement of risk in risk-based capital requirements

Over the past 15 years or so, officials and bankers – and, in a related sphere, insurers – have become overexcited about precise measurements of risk. Advances in finance theory and computing power led too many to believe that the risks to which banks are exposed could be measured 'scientifically'. What this lacked was any of the disciplined scepticism that is, surely, the animating spirit of science. It was as if a bunch of finance economists had inhaled the dogmatic rather than the enquiring spirit of the Enlightenment and breathed it into a load of popular science. That cultural risk persists.

The reliance on internal models overlooked a host of things:

- the short runs of data from which the models were calibrated;
- the presence of strategic interaction in capital markets, which can cause forced selling by herds;
- the related possibility that liquidity in a market can dry up, causing liquidity premiums to soar, and thus asset prices and firms' (mark-to-market) net worth to collapse;
- the principal—agent problems between bank boards, senior executives and the risk modellers themselves, especially if the modellers are close to desk-heads in the firms.

Quite a lot has been done already or is under way to remedy these problems. Basel 2.5 provides a partial correction of some technical mistakes. A more fundamental review of capital requirements for the trading book is under way, including catering for the risk of jumps in liquidity premiums. And the Basel Committee on Banking Supervision (BCBS) is planning an exercise to compare the integrity of risk models across banks and jurisdictions — a legitimate question posed by some bankers. Interestingly, through the Dodd-Frank Act, the US has placed a Basel I-based minimum on the risk weights for different types of exposure.

But beyond all these measures is something else. However well-grounded any calibration of risk, circumstances will eventually arise where it is wrong, and clearly wrong. It is a great mistake for regulators to impale the stability of the system on a set of ostensibly timeless, static capital requirements. Risks and perceptions of risk inevitably change over time, sometimes beyond any range previously envisaged. This is one of the two underlying insights that drive the macroprudential agenda, as I discuss below.

Capital is there to be used: minima versus buffers

Both the first and second Basel Capital Accords were expressed as minima. In an environment that became progressively more reliant on rulebooks, this meant that there were express or implied sanctions for going below the minimum capital ratio. In other words, regulators were aiming to set capital at a higher level than the market would choose, but the capital they required could not be used.

In Basel III, the capital requirement is, for the first time, separated into a buffer and a base minimum. The minimum is designed to be broadly the level below which a normal bank could not operate, that is, the point at which 'resolution' beckons. The crucial new element is the usable buffer. The authorities will need to demonstrate that it is, truly, usable. I doubt that formulaic approaches will work.

This underlines the importance of reinjecting judgement into prudential supervision. Without elaborating on it here, this is absolutely the vision and plan for the UK's new Prudential Regulation Authority, which will be part of the Bank of England once the legislation passes through Parliament.[1]

Liquidity matters too

The Basel Committee was established following the collapse of Bankhaus Herstatt in the mid-1970s. The same crisis prompted the central bank governors' meeting in Basel to have an extended, intimate exchange on how their lender of last resort functions fit together in a world of cross-border, international banking.

This makes it all the more remarkable that in its first 35 years the supervisors' committee did not lay down more than high-level qualitative guidelines for banks' liquidity.[2]

The appalling result was that, by 2007, many banks were perilously reliant on short-term money-market funding. Few held a stock of truly liquid assets. And, perhaps worst of all, the

'treasury' portfolios of many medium-size banks, notably in the UK, comprised paper issued by other banks. At the level of the system as a whole, this was illusory liquidity. Such 'inside' instruments should not count towards banks' liquidity buffers.

What should count is a difficult question, and one that has been causing some angst recently given the realisation that even sovereign bonds can become impaired and illiquid. Unlike the role of equity in capital adequacy, there is no asset on earth that anyone can guarantee will be liquid in all seasons. Except one, that is. Provided central banks sustain low and stable inflation, and thus confidence in their currencies, central bank reserves are the ultimate liquid asset. Indeed, the whole point of a liquidity buffer is that banks should hold a stock of assets that can readily be converted via the market into central bank money — each economy's final settlement asset. Therefore if there is occasionally a shortage of other truly liquid assets, banks could simply hold more central bank reserves temporarily. The demand for central bank reserves reflects the desire of banks to hold central bank balances as a liquidity buffer; and central banks have to supply these reserves to ensure that overnight money-market rates are in line with their policy rates.

Too big to fail

However good the reforms described above are in the microregulatory regime for banks, they — and, indeed, any system of prophylactic regulation and supervision — will eventually be found wanting. Banks and dealers will fail.

The highest priority is to put in place a credible regime for managing the orderly failure of banks and other financial institutions, however large, complex or international. In other words, we absolutely must solve the too-big-to-fail problem.

Orderly failure of banks and dealers: resolution

Where losses exceed equity but outside capital cannot be raised, any kind of business must either go into liquidation or be reconstructed in some way. In the case of banking — and of other, highly levered dealers with illiquid assets — liquidation entails huge costs, a wasteful destruction of value, and disorder as financial contracts are closed out and essential services — payments, credit, risk transfer — are shut down. Regular liquidation will not do.

But reconstruction cannot involve taxpayer solvency support if banking is to remain a properly capitalist enterprise. This is why the FSB has focused on so-called resolution regimes. Stripping away all the detail, they are about spreading losses across creditors through a process that, so far as possible, preserves continuity of those essential services and functions. If one thing has to be achieved, this is it.

In November 2011, the G20 leaders endorsed a new International Standard for Resolution Regimes. As the then FSB chairman, Mario Draghi, has said, this is a breakthrough. The G20 countries have agreed to legislate to put a common resolution regime in place; to remove impediments to cross-border co-operation; and to embrace some incentives for home and host authorities to co-operate. 'Standard' is a term of art in the official world: it means that G20 countries have committed to implement the agreement, and that the IMF will report publicly on what countries have done. No one should doubt the commitment to make progress. In the EU, the European Commission's forthcoming draft directive — requiring member states to introduce highly developed resolution regimes — will, I believe, demonstrate the momentum that exists internationally.

Belt and braces (and some straps too)

But, of course, international policymakers would not sensibly rely on just one set of measures. And we have not done so. The reform agenda is, therefore, much richer.

When the FSB strategy was being developed, we talked openly about a belt-and-braces approach:

- introduce a capital surcharge, of up to 3.5 per cent of risk-weighted assets, to enhance the capital resources of those financial firms whose disorderly failure would carry the greatest economic and social costs and which are typically hardest to 'resolve' using existing technology — so-called systemically important financial institutions (SIFIs); and
- develop those enhanced resolution regimes in profound ways, so that we can resolve SIFIs in future.

We — the international policymakers — have been asked by the industry, repeatedly and not unreasonably, to introduce an explicit trade-off between the resolvability of a SIFI and the extent, if any, of the capital surcharge. At one level, we have declined to do so — we are not prepared to release SIFIs from a capital surcharge on the basis of an as yet untested resolution regime. Perhaps I should say that, as the chairman of the FSB's Resolution Steering Group, I was an active advocate of that position.

But at another level, we have implicitly accepted that resolvability should make a difference. Had we not believed that a robust resolution regime for global SIFIs could and would be developed and used, the pressures for a higher capital surcharge would have been greater.

Banks' capital structure: resolution redux

Imagine that a large, complex, global group has 20 lines of business, each the same size — that is to say, using the same

amount of balance sheet and capital. Imagine it is 50 times levered. Now imagine that one of those lines of business is completely toxic, worthless. The firm is insolvent, bankrupt. Unless it can be resolved, it must cease trading and go into insolvent liquidation.

However, in this example only a single line of business is toxic; the other 19 are fine. In other words, the franchise has value. In the non-financial corporate sector, the remedy would be a negotiated reconstruction of the firm's capital structure, writing off the equity and partially converting debt claims into new equity. In banking, there is not time for a process involving negotiations between the parties under the jurisdiction of the courts. An administrative agency needs to make and execute some rapid judgements. This is precisely what so-called bail-in via resolution is about. Under the provisions of the FSB Resolution Standard, recapitalisation through reconstruction of liabilities can also prospectively cut through a number of the long-standing impediments to resolution stemming from conflicts between home and host country insolvency laws.

A misconception has, however, crept into some commentary about this: that 'bail-in' is the only mechanism through which unsecured, uninsured creditors will be exposed to loss. This, of course, is nonsense. Any resolution mechanism has that effect. The difference between different resolution tools lies in the process through which creditors discover their losses.

Taking the stylised example above, if it is unclear just how many of the distressed firm's business lines are badly infected, 'bail-in' may not be the best tool because the resolution authority would be uncertain beforehand which businesses to write off and thus about how far to write down debt contracts in order to recapitalise the firm. These are circumstances where the best course may be for the resolution authority to split the firm's essential services, such as deposit-taking and payments, from those that need to be carefully wound down.

The proposals of the UK's Independent Commission on Banking work with the grain of that. But no one underestimates the challenge in achieving a controlled wind-down of a trading book. It would be enormously aided by clearing up the organisational and financial structures of individual SIFIs — scaling back the number of legal entities and simplifying intra-group exposures and guarantees. Prudential supervisors are going to have to deliver on that important substantive challenge.

It would also be aided by simplifying the network of exposures among different firms in capital markets. And that is the second great venture of the international reform programme.

Simplifying capital market networks

Financial stability prevails where the financial system is sufficiently resilient that worries about bad states of the world do not undermine confidence in the ability of the system to deliver its core services to the rest of the economy.[3]

Those core services are the transfer of payments, the provision and intermediation of credit and equity, and risk transfer or insurance.

It is too easy to think about this purely in terms of individual firms. Firms are linked by markets and infrastructure — through a network of contracts covering derivatives; repos (repurchase agreements) and securities lending; correspondent banking, clearing and prime brokerage services; and so on. Furthermore, some markets are important in and of themselves because they bring together end-user savers and issuers of securities (bonds and equities). A financial-stability regime that focused solely on the safety and soundness of firms would be myopic.

This means enhancing the transparency of capital markets — around both primary and secondary markets. And it means

direct action to simplify the network of financial exposures among banks and dealers and funds.

One relatively simple action, under discussion at the BCBS, would be to apply tighter controls to large exposures among SIFIs than to other unsecured interbank exposures. In principle, I would favour that. On a second front, central banks can, and should, play a more active role in monitoring and fostering robust practices and infrastructure in the short-term financing markets — repo, securities lending, commercial paper, and so on.

But, to date, the big project has been to move the main over-the-counter derivatives markets on to central infrastructure.

Central counterparties and, again, resolution

Central counterparties (CCPs) simplify the complex web of counterparty exposures through multilateral netting — precisely what the US authorities contemplated trying to achieve in an ad hoc way towards the end of the weekend over which Lehman Brothers was slipping away. But CCPs do more than facilitate multilateral netting. They substitute themselves as the counterparty to the trades they clear — hence a central counterparty.

That makes it more important than ever that the CCPs are themselves safe and sound. Three clearing houses have failed in recent decades. In 1974, the Caisse de Liquidation failed in Paris, due to default on margin calls when sugar-futures prices fell sharply. In 1983, it was the turn of the Kuala Lumpur Commodities Clearing House, when half a dozen large brokers defaulted following a crash in palm-oil futures. And, most dramatically, the Hong Kong Futures Exchange clearing house failed in the wake of the global stock-market crash in 1987. The effects were devastating. Both the futures exchange and the stock market had to close. Reopening the markets was no small feat.

As the post-1987 crash Hong Kong Securities Review Committee commented in the summer of 1988, nearly a quarter of a century ago:[4]

> *When everything else is stripped away, the most pressing issue is the management of risk. The focus of this is … increasingly, the central clearing houses – indeed [their] prudent operation is perhaps the single most important objective for the market authorities and regulators.*

As with banks, public policy for CCPs has to have two components. The first is minimum standards to ensure that CCPs are unlikely to fail. The International Organisation of Securities Commissions (IOSCO) and the Basel Committee on Payment and Settlement Systems (CPSS) are currently consulting on updated standards for CCPs to precisely that end.

If, nevertheless, a CCP does fail, the second component is a clear *ex ante* framework for limiting disorder. I fear that the international authorities have been playing catch-up on that endeavour, but it is now being pursued. It will involve providing clarity, ideally through the CCP's own rules, around the extent to which surviving clearing members are obliged to pick up the pieces, and a special resolution regime for when they cannot.5

Shadow banking

As we simplify the financial network with one hand, we need to take care not to complicate it with the other.

By redrawing the social contract for banking, international policymakers recognise that we are creating incentives for the riskier elements of banking — both commercial and investment banking — to be reinvented outside the banks. Society will be ill served if excessively risky structures threatening stability are constructed beyond the perimeter of prudential

supervision and of special resolution regimes. Of course, not all non-bank structures are or need be unduly risky for the system as a whole. We need a policy for those that are. This is driving the international work on shadow banking.[6]

In the UK, the planned new regulatory architecture seeks to cater for this by giving the Bank of England's new Financial Policy Committee (FPC) an explicit responsibility for advising the government when the perimeter of regulation should be adjusted in some way. How we go about this will need to be made transparent via the published record of our scheduled quarterly meetings and the FPC's twice-yearly *Financial Stability Reports*. This is part of the macroprudential endeavour.

Macroprudential regimes: taking a system-wide view

Alongside resolution, the great revolution in the rebuilding of the regulatory regime for finance is, indeed, macroprudential supervision and regulation.

This entails recovering the understanding of our predecessors. Here is Sir George Blunden, the first chairman of the Basel Committee, speaking in the mid-1980s, when he returned to the Bank of England as deputy governor:[7]

> *Supervisory standards are set with an eye to protecting [banks] from problems which could be created by wider, systemic developments. A bank may consider a course of action it wishes to take to be acceptable – as it may well be in a limited context. But the same course might, if widely copied by other banks, have unfortunate effects on the banking system as a whole. It is part of the supervisors' job to take that wider, systemic view and sometimes to curb practices which even prudent banks might, if left to themselves, regard as safe.*

This can be unpacked into two insights, which have run

through this piece, and which imply a need for what these days are called 'macroprudential tools':

- the financial system is a system;
- any set of static requirements will eventually prove fatally flawed.

The two dimensions of macroprudential policy

It will not be possible to preserve the resilience of the financial system if we rely rigidly on a set of quantitative requirements for capital, liquidity and so on calibrated in 2010—11. Circumstances change. Booms in credit growth and asset prices — and, indeed, cumulative macroeconomic imbalances more generally — typically pose challenges to stability because as boom turns to bust, firms' financial resources get stretched. One important set of macroprudential tools involves temporarily varying requirements on balance-sheet structures or financing terms — such as minimum capital or minimum margin requirements — to reflect the increase in environmental risks. By taking away the punchbowl, we may well have the beneficial effect of dampening the boom itself. But, crucially, even if the boom were to persist, we would have put the system in a better position to absorb the bust without systemic distress. Even without direct management of the supply and allocation of credit, which in truth lies beyond our capability, we can shield the macroeconomy from credit crunches by making the financial system more resilient to stress as threats increase.

This is one dimension. There are two. As experience all too amply demonstrates, stress in the financial system is greater the more complex and opaque the network of exposures among firms and the less adequate a market's supporting (soft and hard) infrastructure. The international efforts on CCPs reviewed above are, of course, directed at just that. But it would be a mistake to think that current policymakers can envisage, let

alone anticipate, all the issues we will face in future. A macroprudential authority therefore needs a flexible range of tools, and to keep abreast of the evolution of the financial system. That has to include capital markets as well as banking.

The role of securities regulation in macroprudential policy

While banking supervisors are having to return to their roots, securities regulators are having to look well beyond their own roots. Their regimes for the issuance and distribution of securities, for transparency, for trading platforms and for asset management all matter greatly to the resilience of the financial system. This is beginning to be recognised. At a global level, the IOSCO is represented on the FSB and, perhaps encouraged by that experience, in February 2011 it published an important report, *Mitigating Systemic Risk*.8 In Europe, the European Securities Markets Authority sits on the Systemic Risk Board. In the US, both the Commodity Futures Trading Commission and the Securities and Exchange Commission are on the new Financial Stability Oversight Council created by the Dodd-Frank legislation.

This is especially important for the UK. London's capital markets are so international that threats to stability from any corner of the globe ricochet through the system, and so through the economy. We cannot afford to ignore capital markets if we are to restore and preserve stability in the UK. The UK's new regime recognises this. The CEO of the planned new market regulator, the Financial Conduct Authority (FCA), will be a member of the FPC once it is placed on a statutory footing. And the government proposes that the FPC be given powers by Parliament to give recommendations and directions to the FCA on where it could develop or apply its policies and rules in the interests of stability.

Summary: finance and the market economy

Market economies cannot operate without a stable financial system. I would go further. A market economy cannot succeed without a financial system that efficiently allocates capital to investment and development projects, and helps households ride the peaks and troughs in their lifetime income. A safe and sound banking sector is essential to that, and to an effective and efficient financial system more generally. Because of myopia about risk,[9] herding, asymmetric information and incentive issues, the state cannot leave finance entirely to its own devices. We are living through a period where millions of jobs have been lost and firms destroyed around the world because an enfeebled financial system could not absorb the crystallisation of risks from an overhang of debt, within and across countries. The 'rules of the game' for finance had failed to keep up with the progressive fusion of banking, capital markets and insurance; and they had not been 'flexed' in response to the accumulation of macroeconomic imbalances.

The greatest failure of all was the absence of a regime for the orderly resolution of distressed financial firms, without taxpayer solvency support.

The package emerging from the international community is just that — a package. Those of us who signed up to core capital requirements of around 10 per cent — or 13 per cent including convertibles — for the largest banks have done so in the light of other components of the package. Throughout this piece, I have stressed two. First, we are determined, and are on course, to put a credible resolution regime in place. This will ensure that, as well as equity holders, debt holders are exposed to loss. Wholesale creditors will then also have a powerful incentive to monitor the risks banks run, increasing market discipline. This is central to reincorporating banks into a market economy. Second, we are building macroprudential frameworks under

which capital requirements can be adjusted temporarily — or 'counter-cyclically' — as and when risks are unusually high, and reduce them back to more 'normal' levels as extraordinary incipient threats recede. Those extra dimensions of the overall policy package have, rightly, mitigated the internationally required increases in equity capital.

It would be foolish to declare that policymakers know enough to get all this exactly right. We do not know enough about the existence of economies of scale and scope in large global banks and dealers. We do not know enough about how the incentives of asset managers investing in banks' equity and bonds affect the behaviour of banks. No one can know as much as we would like about the effects on the business cycle of introducing the existing package of reforms now — which is why we have tried to provide for extended transition periods. Some might argue that reform should wait until economic recovery is entrenched and until we have had time to do more research. But pursuing reform now is not just a matter of responding to public concern, important though this is. Credible reform is also crucial to restoring confidence in the financial system and thus to delivering a vibrant, effective system. This is necessary for durable economic recovery, and for sustainable economic growth over the longer term.