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Resolution policy and systemic risk: Five entreaties

Perhaps the bigget lesson of the Great Financial Crisis was that it is a very big mistake to focus regulatory policy almost exclusively on reducing the *probability* of financial intermediaries failing. Looking back, this long-standing mindset is truly bizarre given the habitual refrain of prudential supervisors (and their political overseers) that they do not aim for zero failures. That being so, it is absolutely vital also to focus on containing the impact of intermediaries' distress and failure.

While the United States went into the crisis with an effective resolution regime for small and medium-sized deposit-takers, few other G7 countries did. And even the US did not have a resolution regime that could cope with the failure of large and complex banking groups or of those non-banks whose bankruptcy would exacerbate systemic spillovers.[1]

Perhaps the most profound shift in high policy following the disaster of 2008/09, therefore, is the effort to give resolution policy equal standing with prophylactic regulation and supervision. If that was the goal, however, it has not yet been achieved. While the United States has done a lot more than most of its peers to implement internationally agreed policy on resolution, it has not done nearly as much as it could have. And while the EU has a strong statutory framework – possibly better than the US's – its implementation has to date been flawed.

Against that background, I will briefly make five points, which amount to a series of entreaties to current policy makers. They concern: the need to be careful when claiming that Too Big To Fail has been "solved"; how resolution policy can lift a burden from the Lender of Last Resort; how prudential supervisors need to be more prescriptive about the structure of banking groups; how resolution policy can hard wire cross-border cooperation; and how it could help contain a full blown systemic crisis in which many intermediaries were falling over more or less simultaneously.[2]

1 Amazingly, the lack of such tools had been made clear in the early-2000s in an unpublished report to the then Financial Stability Forum and G10. Disclosure: I was a member of the working group.

2 This draws on Tucker, "Resolution Policy and Resolvability at the Centre of Financial Stability Regimes?" IADI/BIS FSI conference, Basel, 1 February 2018. http://paultucker.me/wp-content/uploads/2018/04/Resolution-Policy-And-Resolvability.pdf

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The hazards in claiming to have "solved" too big to fail

Policymakers have become fond of suggesting that they have solved the problem of Too Big to Fail (TBTF). ~~This~~ is some truth in this, but the claim can also mislead anyone not intimately involved. I will try to distinguish the wheat from the chaff.

The sense in which it is true is that more jurisdictions are now approaching the position that, in October 2013, shortly before leaving office, I said the US had already reached[3]:

> I cannot see how the US Administration could persuade Congress to provide taxpayer solvency support to – ie bailout – some of the biggest US banks and dealers. In short, the US authorities have the technology – via Title II of Dodd Frank; and, just as important, most US bank and dealer groups are, through an accident of history, organised in way that lends them to top-down resolution on a group-wide basis. I don't mean it would be completely smooth right now; it would be smoother in a year or so as more progress is made. But in extremis, it could be done now.

But the statement that Too Big to Fail has been solved is misleading if understood as meaning or implying that no firm's distress could ever, in any circumstances, cause economic dislocation and other social costs.

In the past, when faced with an ailing large and complex firm, the authorities felt they had to choose between, on the one hand, putting the firm into a regular bankruptcy proceeding and accepting massive systemic disorder and, on the other hand, a taxpayer bailout to avert systemic collapse. That is no longer so.

When a giant firm fails, there will be nasty spill overs. But using the resolution strategies described below, it should be possible for the social pain to be contained sufficiently for government bailout not to be the *only* sane policy response. That will be achieved if resolution can ensure that essential services to the real economy (payments transfers, credit supply, risk transfer) are tolerably maintained. Indeed, preserving the flow of essential services should be thought of as the objective.

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3 Paul Tucker: Solving too big to fail – where do things stand on resolution?
Speech by Paul Tucker, Deputy Governor, Bank of England, at the Institute of International Finance 2013 Annual Membership meeting, Washington DC, 12 October 2013. The 'accident of history' referred to is that, as a result of a long-repealed bar on inter-state banking, most significant US banking groups comprise operating companies owned by a pure holding company that does not itself provide services to households or businesses.

The acid test of whether that objective has been achieved is whether elected politicians *do feel compelled* to bail out equity holders and bondholders. If they do, the banking system is semi-socialised, which would continue to fuel popular discontent. On that basis, the Italian bailouts during 2018 were a clear (and avoidable) policy failure.

In summary, my first entreaty is that policymakers should take care to explain that resolution of massive firms will contain distress but not eliminate it. The public needs to know that our economies need not revisit the barely controlled mess of 2008, but understand that banking failures will not be painless.

Transformation for the lender of last resort

Once credible resolution regimes and plans are in place, a *fatally* wounded firm should not be propped up by lender-of-last-resort (LOLR) assistance from the central bank. This matters to the legitimacy of independent central banks because critics allege, fairly or unfairly, that some, including the Federal Reserve, overstepped the mark in the past.[4]

If a firm is fundamentally bust, there should be no question of liquidity assistance from the central bank. Similarly, if the condition of an initially solvent firm deteriorates after LOLR support has been extended to the point where it is fundamentally insolvent, the central bank should withdraw its support and put the firm into resolution. Of course sometimes liquidity assistance can restore an ailing firm to health, and liquidity assistance to the system as a whole can sometimes lift asset prices and avoid economic collapse, levitating distressed firms back to life. So by "fundamentally bust" I mean that there is no realistically plausible path for the economy and, hence, for the firm's asset portfolio under which it will be able to repay its debts as they fall due.

The vital distinction between fundamentally sound and unsound borrowers for LOLR policy arises because time-subordination exists while a firm is alive

4 Whether or not it is true, that is levelled at the Fed by various authors (who reach different normative judgments). See, for example, Humphrey Thomas M. "Lender of Last Resort: What It Is, Whence It Came, and Why the Fed Isn't It." *Cato Journal* 30, no. 2 (2010): 333–64; Posner, Eric, "What Legal Authority Does the Fed Need during a Financial Crisis?" University of Chicago Public Law Working Paper, no. 560, February 3, 2016; Wallach, Philip. *To the Edge: Legality, Legitimacy, and the Response to the 2008 Financial Crisis*. Washington, DC: Brookings Institution Press, 2015.

but not when in bankruptcy.[5] In consequence, liquidity assistance to a fundamentally bust bank allows short-term creditors to be repaid at the expense of long-term creditors of the same rank. It is not for unelected central bankers to play God in that way, side-stepping the long-standing policy preferences embedded in bankruptcy law.

"But we are playing God if we let firms fail," some might answer. Whatever one thinks about how they handled that dilemma in the past, they can escape it now. Credible resolution plans for handling irretrievably bankrupt firms makes it credible for the LOLR to say 'no'.

This regime change does not preclude central banks providing *post-resolution* liquidity assistance to firms that have been restored to solvency and viability (as well as to innocent bystanders).

More central banks need to make all this clear in public statements of their LOLR principles, which they should discuss much more than in the past. The doctrine of "constructive ambiguity", a casual refrain for so many years, was a mistake.[6]

Resolvability through structure: Reorienting prudential supervisors

Given the shift in high policy I have described, it is essential that prudential supervisors focus not only on reducing the probability of failure. They must also work backwards from insolvency and lack of viability, ensuring that distress, when it occurs, does not entail taxpayer bailout or a systemic crisis.

5 When a firm is alive, long-term claims fall due after maturing short-term claims, exposing long-term creditors to the risk that the firm deteriorates before their claims approach maturity: this is time-subordination. Upon entry into bankruptcy, however, things are different. Some debt claims are accelerated by their contractual terms and, more generally, liquidators are not permitted to pay out to short-term creditors if longer term creditors of the same seniority would be left worse off as a result: their claims rank *pari passu*. On the "no lending to fundamentally unsound firms" precept and the insufficiency of good collateral, see *Unelected Power*, chapter 23, and Tucker, "The Lender of Last Resort and Modern Central Banking: Principles and Reconstruction." BIS Papers, No. 79, Bank for International Settlements, 2014.

6 For the ECB, see Yves Mersch, "The Limits of Central Bank Financing in Resolution," European Central Bank, 30 January 2018. Also, Bank of England, *Approach to Resolution*, October 2017, page 22. It matters at what point in the resolution process the Window should become available: it should be once the LOLR is satisfied that the operating company has been restored to solvency, not when all the formalities, which might take months, are complete.

A sound statutory resolution regime, with a wide range of powers, is necessary but not sufficient. It is equally necessary to reorient supervisors towards ensuring that groups and firms are resolvable using those powers. That was the plan. Things have been done but it is, at best, work in progress. So my entreaty here is to redouble action on this front.

The key initiative must be mandating corporate structures – legal and financial – that enable resolution tools to be used in a way that can keep distressed operating companies going while imposing losses on subordinated creditors. The utility of the so-called bail-in instrument depends on corporate structure, as I described back in 2013[7]:

> The Single Point of Entry versus Multiple Point of Entry resolution strategy distinction may be the most important innovation in banking policy in decades
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> We will learn to speak of banks and dealers as either "SPE groups" or "MPE groups". Some technical developments don't matter hugely. This one does.
>
> A single-point-of-entry or SPE resolution works downwards from the group's top company – most simply, a pure holding company (Holdco). Losses in subsidiaries are first transferred up to Holdco. If Holdco is bankrupt as a result, the group needs resolving. The "bailin" tool is applied to Holdco, with the equity being written off and bonds converted as necessary into equity to recapitalise the group. Those bondholders become the new owners. The group stays together.
>
> Under multiple-point-of-entry or MPE resolutions, by contrast, a group would be split up into some of its parts. Healthy parts might be sold or be maintained as a residual group shorn of their distressed sister companies. The resolution of the distressed parts might be effected via bailin of bonds that had been issued to the market by a regional intermediate holding company…
>
> For many financial groups, it is fairly obvious which broad resolution strategy (SPE or MPE) they are currently most suited to. But few major groups will escape having to make significant changes to their legal, organisational and financial structure to remove obstacles to effective resolution under that preferred strategy…
>
> For "MPE groups", many will need to do more to organise themselves into well-defined regional and functional subgroups, perhaps with regional or functional intermediate holding companies, which could be subjected to SPE resolutions. And these groups will need to ensure that common services, such as IT, are provided by stand-alone entities under contracts that are robust enough to survive the break up of the group.

Enshrined and promulgated via the Financial Stability Board's *Key Attributes of Effective Resolution Regimes*, endorsed by G20 leaders in 2011, this regime shift

7 Tucker, "Solving Too Big To Fail: Where Do Things Stand on Resolution?", Bank of England, October 2013.

generated a need for minimum required levels of *gone-concern* loss-absorbing capacity (colloquially, bail-inable bonds).[8] The FSB delivered that through its requirements for total loss-absorbing capacity (TLAC).

I have two specific entreaties.

'Inside' versus 'outside' loss-absorbing capacity

The first concerns who holds the bonds that would fall to be bailed-in immediately after equity is extinguished. If contagion is to be contained, this very obviously matters. Holders should not include other banks or bank-like entities such as money market mutual funds: otherwise, the monetary system would have only 'inside' loss-absorbing capacity, which is of no use at all in protecting the system as whole.

But that policy cannot be enough. Longer-term investment institutions, such as life insurance companies and pension funds, should be subject to aggregate exposure limits to such instruments. And retail investors must be warned that they are risky: exactly what did not happen in Italy, despite their officials being alerted to this years ago.

We should be concerned, then, that G20 policy statements do not go further than saying that there should be limits on the biggest firms and other internationally active banks holding each other's TLAC instruments; and that the implementation in some jurisdictions, including the EU, is arguably weaker still.[9] This leaves open the incentive of bankers to distribute bonds issued by global banks and by domestically significant firms to medium-sized domestic banks and money funds, a likely (and crazy) recipe for contagion from distressed global firms to domestic financial systems. Similarly, it gives banks incentives to sell their bonds to retail investors, an equally reckless recipe for political pressure to resort to bailouts rather than bail-ins.

8 The term 'bail-inable bonds' is a convenient but misleading shorthand. Whether something can be bailed-in as a matter of law is simply a question of the resolution authority's statutory powers. Whether it is sensible to do so given the public policy objective depends on the firm and group's capital structure. This is not about term sheets and financial engineering. A recent G30 report gets in muddle over this: p.10 of Group of 30, "Managing the Next Financial Crisis," 2018.

9 Financial Stability Board, 2015, Total Loss-Absorbing Capacity (TLAC) Principles and Term Sheet, November, Principle (xii). http://www.fsb.org/2015/11/total-loss-absorbing-capacity-tlac-principles-and-term-sheet/

Prescribing the ranking of opco creditors

My second entreaty to prudential supervisors concerns the creditor hierarchy of operating banks and dealers. It requires a second round of fundamental policy initiatives.

In my description of SPE-resolution groups (and MPE-resolution groups), I assumed that the bonds to be bailed in were issued by a pure holding company (or, for MPE-groups, intermediate subgroup holdcos), and so were structurally subordinated. Many current and former policymakers, including myself, prefer structural subordination, but it is not an international standard or, more important, universally applied.

Where subordination is delivered either by legislation (Germany) or contract (France), it is the external creditors of the operating entity that will be haircut when it fails, which I expect to pose formidable communication difficulties for the authorities as they will have to explain why a firm is sound even though it is in intensive care. Be that as it may, however, resolution authorities *everywhere* cannot rely 100% on the first layer of required bailin-able bonds sufficing in every single case to absorb losses and recapitalize a distressed firm. When, eventually, that proves not to be the case, the authorities concerned will be faced with haircutting other creditors or, alternatively, providing fiscal support to the ailing firm after equity holders and subordinated bondholders have been wiped out.

At present, in some jurisdictions the resolution authority is permitted to distinguish between creditors that, formally, would rank equally in bankruptcy if it judges that differential treatment is necessary to maintain financial stability (or contain instability). This is not infrequently objected to on the grounds that it cuts across our rule-of-law values of fairness and predictability. The trade-off is clear enough. Either resolution authorities (and bankruptcy judges) need to be able to exercise discretion in the pursuit of a clear statutory objective to contain instability; or legislators and/or regulatory authorities need to be much more prescriptive about the permissible creditor hierarchy so that the need for any such discrimination is eliminated.

In Europe, this is the background to legislators having made insured depositors (and the deposit insurance scheme) preferred creditors. But more granular prescriptions would ~~be~~ prove to have been needed if ever a large and complex operating company goes into resolution. For example, is it really sensible for trade creditors (for example, the people who supply food and transport services to banks) to rank equally with senior bondholders? Should there be a distinction between wholesale deposits that are short-term and long term? Where should derivative counterparty-credit exposures come?

I am not going to offer specific proposals here. Instead, I want to underline that those who argue *against* resolution agencies exercising discretion should also be arguing *for* greater regulation of bank and dealer creditor hierarchies. That is a hole in policy on both sides of the Atlantic.[10]

Hard wiring cross-border cooperation

I still occasionally hear current and former policymakers saying that the biggest challenge during a resolution will be cross-border cooperation. I find this baffling given the policy debates and agreements that were, and I believe remain, central to the post-crisis reform programme.

The plans I summarized for SPE-style resolutions were designed to – and *can* – solve the challenges in the cross-border resolution of international banking groups. In essence, the solution is for overseas (and domestic) opco subsidiaries to issue super-subordinated debt to their parent group/sub-group holdco, with *host* authorities being able to trigger write down (or conversion into equity) whenever they would otherwise be empowered to put the subsidiary into a local resolution or bankruptcy process.[11]

Those subordinated intra-group bonds become known as Internal TLAC.[12] Writing them down/converting them into equity enables losses exceeding a foreign subsidiary's equity to be transmitted up to the home country holding company (or intermediate holdco), without the local subsidiary itself going into default. If as a result the foreign holding company is mortally wounded, that is for the group's home authorities, and for them alone, to sort out.

Thus, careful specification of the trigger for "converting" intra-group debt into equity can hard-wire co-operation between the home and host authorities. This requires open and frank discussions. When planning for resolvability, home and host authorities might fail to agree, for any one of a number of

10 The gap exists in, for example, the report by the US Treasury: US Department of the Treasury, *Orderly Liquidation Authority and Bankruptcy Reform* (Feb. 2018), *available at* https://home.treasury.gov/sites/default/files/2018-02/OLA_REPORT.pdf.

11 For a post-office account of the analysis underpinning the new resolution policies, see P Tucker, 'The Resolution of Financial Institutions without Taxpayer Solvency Support: Seven Retrospective Clarifications and Elaborations', European Summer Symposium in Economic Theory, Gerzensee, Switzerland, 3 July 2014.

12 Financial Stability Board, 2015, Total Loss-Absorbing Capacity (TLAC) Principles and Term Sheet, November. http://www.fsb.org/2015/11/total-loss-absorbing-capacity-tlac-principles-and-term-sheet/

reasons, that intra-group gone-concern loss-absorbing bonds must be issued by an opco subsidiary to its foreign holdco, For example, home authorities might worry that a host would be trigger happy. On the other side, it cannot be ruled out that a host supervisor would conclude that their local subsidiary ~~is~~ unviable on a stand-alone basis even if clearly solvent, but that the group's home authorities are not capable of delivering a top-down resolution of the group as a whole. In either of those (and other) circumstances, home and host authorities would be discovering *ex ante* that they cannot rely on each other.

The problem having been brought to the surface, it would need to be confronted up front. To make its business resolvable, any such group would need to be broken up in some fashion or restructured into ring-fenced silos (for MPE resolution). However disappointing, that is much much better than host and home authorities discovering in the midst of an actual crisis that they cannot rely upon each other.

This should – and, to be clear, was definitely intended to – give a harder edge to discussions amongst home and host authorities, finally bringing real substance to supervisory and crisis-management colleges (whose members have had incentives to attest that they work better than, I suspect, independent observers or top policymakers believe).

The question is whether or not this kind of hard-edged engagement is what is going on. I am not convinced that what I have been describing, the very core of the FSB Key Attributes-led policy, has been gripped (or, perhaps, even understood) across the policy-making community.

My entreaty here, therefore, is that home and host authorities publish exactly where they have got to on each group designated as globally systemic.

What about a systemic crisis?

My final entreaty concerns what happens when a few, even a host of, systemically significant financial institutions (SIFIs) fail more or less simultaneously.[13] Critics of resolution policy say that in those circumstances governments are still going to bail out firms, and thus that not much has changed.

13 With some hindsight, it was a mistake to move from the pre-crisis term Large and Complex Financial Institution (LCFI) to Systemically Important Financial Institution (SIFI) as the latter invites the perception that SIFIs need to be bailed out by the taxpayer – a perception that critics have been keen to foster and embed in public opinion.

While this should obviously be taken seriously, we should not fall into a pessimism of absolutes.

In the first place, even if bail-in were to work only for idiosyncratic cases, it could still bring about a substantial change in market discipline, reducing the moral hazard that plagues finance.

Second, the critics are wrong to say that bail-in must entail contagion. If the structural policies I have described are followed and if sufficient gone-concern loss-absorbing capacity exists, applying bail-in would not directly create disorder through the financial system's inter-connectedness. That is because operating banks would not go into bankruptcy or resolution, and investors in the bailed-in holdco bonds would be longer-term or unlevered investment vehicles with limited aggregate exposures. I would entreat critics to descend from generalisations and look at how far jurisdictions are (or are not) pursuing some of the necessary supporting policies I have summarised.

Third, the perfectly valid (and obvious) point that executing bail-in would be more difficult during a fully fledged systemic crisis does not mean that elected politicians should deliberately, by design, be left with no option other than to bail out bondholders and equity holders. That would be to repeat the tragic mistakes of pre-crisis policymakers.

An alternative would be for central government politicians to have the power to apply bail-in across the board to as many distressed firms as necessary. This power would have to be exercised *before* every afflicted firm had reached the point of non-viability (PONV) relevant for a stand-alone bail-in. ~~it~~ would involve bondholders, not taxpayers, recapitalising the system.

I am not saying that executive government could confidently be relied upon to deploy multiple-firm bail-in rather than bailout. Nor am I asserting that there is a zero chance of fiscal measures being needed at some point in the future.[14] But the frontier at which taxpayers come to the rescue in order to keep the financial system going can be shifted outwards. In terms of incentives, it would be useful, moreover, to put politicians in a position where they have to account *ex post* for actively choosing bailout rather than other crisis-management tools available to them.

So my final entreaty is to take systemic crises seriously rather than as an opportunity for making debating points. Although not discussed here, I take that to be the spirit of Mervyn King's proposal~~s~~ that all the short-term liabilities

14 A point stressed by former Secretary Geithner, who very much continues to focus on the inevitability of extemporizing in the face of unimagined disasters. Geithner, Timothy, "Are We Safer? The Case for Updating Bagehot." 2016 Per Jacobsson Lecture, The Per Jacobsson Foundation.

of banks should be covered by assets that can be used as collateral at the central bank.[15] My proposal is complementary as liquidity cannot bring back to life fundamentally insolvent firms, only (sometimes) the innocent bystanders.

Conclusions

Experience surely makes it clear that a resilient financial system cannot be delivered only by trying to avoid firms failing, the traditional focus of prudential supervisors. Instead, a decent system will be able to cope with failure, containing the social costs of financial firms' distress when it inevitably occurs. That belated realization was at the very centre of post-crisis policy. But it has yet to achieve the prominence it badly needs in public debate.

In this essay, I have made a series of entreaties. They are that:

1) Policymakers should take care to explain that effective resolution of massive firms really will contain distress but will not eliminate it.
2) Central banks should publish how the availability of credible resolution regimes has changed the way they will operate LOLR policies.
3) Prudential supervisors and securities regulators should be more prescriptive about who can hold financial groups' bail-inable debt, and about the permissible creditor hierarchy of operating companies supplying important financial services.
4) Home and host authorities should announce for every systemically significant financial group whether they have reached agreement on local subsidiaries issuing to their foreign parent bonds that the host could write down or convert into equity; and how they plan to restructure any groups which they have not reached such an agreement.
5) Policymakers should explore what new resolution powers for the executive branch might help to avoid taxpayer bailouts in a systemic crisis with multiple firms in distress simultaneously.

15 Mervyn King, *End of Alchemy*, chapter 7, pp. 269–281. An idea of this kind was first floated in the Bank of England when, before the Great Financial Crisis, we were thinking about contingency plans for a 9/11-type disaster. I describe how the idea could be operationalized in Tucker, Paul (2018), "Is the financial system sufficiently resilient? A research and policy agenda on informationally insensitive 'safe' assets within a money-credit constitution", BIS Working Papers, forthcoming.

Of course that is not the beginning and end of crisis-management policy. We also need to know, for example, how supervisors will use the time provided by central banks' liquidity assistance to make banks and other intermediaries deleverage before it is too late: a missed opportunity during the 2007/08 crisis on which we are no wiser.

But effective resolution policy is within the grasp of the authorities, and needs to be completed. Those interested in a stable financial system have got to generate as much discussion and media coverage of resolution policy as already exists for the more familiar parts of banking supervision. The thing about avoidable mistakes is that they can and should be avoided.