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Comments on the Financial Stability Board's Consultation Report of June 2020 "Evaluation of too-big-to-fail reforms"

1. The Financial Stability Board (FSB) is to be highly commended for its report on the too-big-to-fail reforms undertaken since the global financial crisis of 2007-09. I know of no other attempt at surveying and evaluating the measures that have been taken that would equal this one in terms of comprehensiveness and competence. This being, I have several important points of criticism, which I will lay out in the following comments. The fact that these comments are critical should not however obscure the fact that I applaud the overall undertaking and consider the Consultation Report to make a great step forward in the official debate about regulatory reforms.

2. **Systemic Risk and its Causes**

2.1 **Bank Shareholders' Funding Incentives**

Section 2.1 of the report links the too-big-to-fail problem to the systemic importance of a bank and to distortions in the incentives of market participants. Banks' shareholders neglect the systemic externalities of their decisions; moreover, explicit or implicit government guarantees create incentives for excessive debt finance and excessive risk taking.

Without doubting the importance of these effects, which might be expanded to include biases created by the deductibility of interest in the corporate income tax, I would like to point out that incentive distortions arise not only from a neglect of external effects on third parties but also from an inability to commit future decisions and the resulting time inconsistency issues. Once a firm (any firm) is highly indebted, a new funding decision is biased against equity (through retentions as well as new issues) and in favour of debt. The simple dilution argument that a new equity issue lowers the incumbent shareholders' ownership share, which is often raised in discussion, is inconclusive because, while the ownership share goes down, the assets go up by the amount that the new shareholders contribute; moreover, this argument does not apply to retentions. A closer look, however, reveals that the increase in the value of assets that is induced by an equity issue or a retention is not matched by an equal increase in the value of equity because some of the

benefits from the increase accrue to debt holders rather than shareholders. In consequence, shareholders are biased against equity funding. Funding by additional debt rather than additional equity may be socially expensive, but the cost would be borne by debt holders, so this is an additional externality that needs to be taken into account. For a detailed account, see Admati et al., The Leverage Ratchet Effect, *Journal of Finance* 73 (2018), 145–198.

If such decisions could be committed in advance, the bias might disappear through initial contracting with debt holders imposing covenants. With nonfinancial firms, such covenants are actively used – and enforced by creditors whose numbers are usually small enough to allow for effective coordination in enforcement. With multiple, highly fragmented debt holders, however, as banks have, such covenants are hardly enforceable and therefore not credible. For a detailed account of the impact of fragmentation of creditors, see Admati-Hellwig, Bank Leverage, Regulation, and Welfare, in: D.W. Arner, E. Avgouleas, D. Busch and A.L. Schwarcz, *Systemic Risk in the Financial Sector: Ten Years after the Great Crash*, Centre for International Governance Innovation, Waterloo, Ont. 2019, 217 – 233.

In discussions about equity funding of banks, one often hears that a bank is *unable* to raise equity. The argument just given justifies this statement with the proviso that the bank is unable to raise equity *at a price that is acceptable to shareholders*. Without this proviso, the statement is not correct, unless the bank is technically insolvent. To see this, let A be the value of the bank's assets D the face value of debt and O the value of the option to default on the debt. Then the value of equity is A+D-O. Suppose that a new equity issue adds an amount C to the bank's assets. Since the value of the default option is nonnegative, the post-equity-issue value of total equity, A+C-D+O, is at least C, unless A<D, in which case the bank is technically insolvent. Banks that are in fact unable to raise equity should be supervised with special care because their solvency must be doubted.

2.2 **Systemic Effects of Funding Mixes**

The report's discussion of the systemic effects of funding choices is too narrow. The report focuses on excessive risk taking, which is very important, but other effects must be considered as well:

- The higher the bank's leverage, the greater are the distortions of funding decisions discussed in 2.1 above.

- Excessive risk taking is not the only response to debt overhang. Another response that must be considered involves inadequate treatment of nonperforming loans. In principle, bank behavior towards problem borrowers is a matter of entrepreneurial choice, where one may assume that the bank is best placed to assess different strategies with varying degrees of strictness. This principle cannot be presumed however if the bank must take account of repercussions that its choices may have on its relations to debt holders and supervisors.

For example, if the bank's own solvency is in doubt, the bank may have excessive incentives to exercise forbearance in order to avoid having to register a credit event, to book provisions against losses or even to take writedowns. In this case, the bank's choice is distorted by concerns about third parties' reactions to the need for provisions or writedowns, which have nothing to do with the costs and benefits of forbearance per se. Such behavior can be socially inefficient because it prevents markets and supervisors from imposing proper discipline. It can also be socially inefficient because the forbearance that is exercised towards zombie borrowers is an impediment to structural change and productivity growth, as exemplified by Japan in the 1990s. For details, see the report 01/2012, "Forbearance, resolution and deposit insurance", of the Advisory Scientific Committee of the European Systemic Risk Board.

- Excessive forbearance towards borrowers, as discussed in the previous bullet point, is an example of a more general kind of behavior involving excessive caution. Whereas debt overhang and even more so hidden technical insolvency motivate some banks to gamble for resurrection by taking excessive risks, they can also motivate others to refrain from any risk taking altogether, for fear that any mishap might trigger a disaster, with a hope that "corrections" in markets or in the overall economy might eliminate the need for any further corrective action. Such quietism can also have systemic effects, not so much because it may trigger an acute crisis as because it deprives the economy of the funding of new firms and structural change that it needs.

- The kind of dynamic that is sketched in the preceding bullet points often involves delays of exit from the market. Such delays, and the associated persistence of participation in markets, contribute to the maintenance of excess capacities and thereby to pressures on the profitability of other banks. Later on, on pp. 47 f., the FSB report mentions that profitability of banks is low and has been declining, especially in Europe; it is important to see to what extent this finding is a result of insufficient exit.

2.3 "Procyclicality"

Much of the discussion of equity regulation focuses on the role of equity as a buffer against losses and on the effects of equity on incentives. The notion of "buffer" is seen in the context of insolvency avoidance, the incentive effects are discussed in a static one-shot risk taking setting. Both perspectives are too narrow.

In a dynamic setting with choices taken over and over again, the buffer role of equity is not limited to insolvency avoidance. It also concerns the reactions of solvent banks to ongoing losses. Banks that had more equity to start with are in a better position to continue lending. Propagation effects of a bank's losses through the bank's reaction to these losses are smaller if the bank had more equity to begin with. Suppose for example that a bank starts out with equity funding amounting to 2% of its total assets. If this bank incurs a loss equal to 1% of its assets, fully one half of its equity is wiped out. Merely to re-establish the 2% ratio, it must reduce total assets by 50%, unless it issues new equity, which it usually does not want to do, as discussed above. If the initial equity funding had

been 20% of total assets, the loss would have wiped out 1/20 of the equity, and a reduction of total assets 5% would have been sufficient to reestablish the 20% equity ratio. The systemic impact, on borrowers and/or asset markets, would be that much smaller.

Importantly, equity requirements are not only about the amount of lending or investing that banks can do at any time; they are also about the time path of such lending and investing as the banks experiences fluctuations in profits and losses. At any given point in time, a given equity ratio may be seen as a constraint on the amount of lending and investing the bank can do; over time, however, a higher equity ratio serves to smooth the time path of lending and investment because the banks reacts less radically to realized profits and losses. Putting the point in more drastic terms: Between the Great Depression and the Corona Crisis, the worst decline in bank lending and growth in the global economy occurred in the fourth quarter of 2008, and this decline had a lot to do with the exceedingly small levels of equity that banks had prior to the crisis.

Conceptually, this point could already have been made under 2.2 above, but the change in perspective, from considering an individual institution at a given point in time to considering that institution's behavior, and the systemic impact of that behavior over time, is sufficiently important to warrant a separate treatment.

2.4 **Systemic Interdependence**

The Consultation Report seems to consider systemic risk in terms of linear causation. Some interdependences are acknowledged, e.g., in the treatment of the effects of implicit funding subsidies on funding outcomes (p. 13), but the basic line of causation goes from the decisions of individual institutions to system effects that can be dangerous. In this context, too, however, mutual interdependence may be important.

To see the issue, it is useful to go to the discussion of interconnectedness in Section 6 of the report. The discussion mentions that interconnectedness can be indirect as well as direct, but it does not go much further. Yet with indirect interconnectedness, mutual interdependence is as important as interdependence through chains of linear causation.

As an example, consider the impact of the Lehman bankruptcy on the German bank Aareal Bank. The Lehman bankruptcy caused the Reserve Primary money market fund to break the buck; this in turn triggered a run on Reserve Primary – and on other money market funds. These funds were forced to reduce their lending in global money markets. The freeze in these markets affected all institutions that had significantly relied on wholesale funding, among them Aareal Bank, a German institution involved in covered-bond finance of real estate investments that used wholesale markets (and some deposits from institutional investors) to fund whatever was not financed through covered bonds (warehousing, excess coverage). For other institutions in this business, such as Hypo Real Estate, Dexia, Commerzbank (Eurohypo), West LB (WestImmo), one might have argued that funding difficulties were due to concerns of investors about these institutions'

solvency; with Aareal Bank, solvency never was in doubt, and yet this bank was also affected by the freeze.

Interconnectedness in this example was due to the common reliance of Lehman Brothers and Aareal Bank on wholesale money market funding, in combination with a simple domino effect of the Lehman bankruptcy on Reserve Primary and the ensuing run on several money market funds and the freeze of money markets. For details of the mechanisms, see Chapter 5 of Admati-Hellwig, *The Bankers' New Clothes*, Princeton UP, 2013, as well as Hellwig, Systemic Risk, Macro Shocks, and Macro-Prudential Policy, Paper presented at the ECB's 2018 Macroprudential Conference (attached).

For the assessment of the too-big-to-fail problem, it would be important to have an overview over the extent of money market funding and the vulnerability of money market funding of major institutions. In addition to the sheer magnitude of losses from subprime and related activities and to the sense of crisis that prevailed, the mere mechanics of money market developments played a key role in the fall of 2008 (and had a repeat performance in Europe in 2011, stifled only by the ECB's LTRO in December 2011/January 2012).

As far as I can tell, the dependence on this kind of funding has not been much reduced. Supervisors may believe that rule changes concerning stable NAV and/or sponsor support have reduced or eliminated the likelihood of a run. I am not convinced that this is the case and believe that it would be important to have numbers on system dependence on these institutions. Concerning stable NAV, I recall a paper by Jeff Gordon at Columbia that showed that, while the runs started with a stable NAV fund (Reserve Primary), in the crisis altogether, variable NAV funds (in Europe) were just as much hit by runs as stable NAV funds.

Indirect interconnectedness from doing something that other banks are also doing concerns the asset side of the balance sheet as well as the liabilities side. In 2007/08, an important linkage occurred because fair-value accounting rules required banks to take losses when the assets in their balance sheets lost in market value. With multiple institutions holding parallel positions in subprime and related securities, this meant that price declines affected many at once; moreover, any one institution's deciding to sell such securities put pressure on the securities' prices and thereby on the balance sheets of all the others, potentially with further repercussions as discussed in 2.3 above. For details of the mechanism, see Hellwig, Systemic Risk in the Financial Sector: An Analysis of the Subprime-Mortgage Financial Crisis, *De Economist* 157 (2009), 129-157.

3. **Bank Resolution**

Bank resolution is at the core of the too-big-to-fail problem. As long as we are unable to resolve systemically important institutions without significant fallout for the overall

financial system and the economy, the too-big-to-fail problem remains with us (unless of course, we get rid of systemically important institutions altogether).

The FSB rightly emphasizes the progress that has been made in this matter. It also points to remaining problems. Alas, the remaining problems are so important and so seemingly unsolvable that resolvability of systemically important institutions remains a pipedream. In this section of my comments, I highlight the issues and explain why I consider the problems to be too difficult to admit of a solution, at least one that it politically feasible.

3.1 **Institutions with Systemically Important Operations in Multiple Jurisdictions**

The Lehman Brothers bankruptcy provided a paradigmatic example of what can go wrong when an institution has systemically important operations in multiple jurisdictions. The London establishment of Lehman Brothers was a legally independent subsidiary, so the UK authorities were in charge. Having separate authorities in charge in different jurisdictions destroyed operational processes that were integrated across the entire organization, such as cash management. (Shared IT systems are probably even more important, and their disintegration more dangerous, in this respect.) Lack of cash was an immediate reason why systemically important operations of LB London could not be maintained, even for a while.

For years, the FSB has proposed to address the problem by having a single point of entry (SPE) for resolution, e.g. have the authorities in charge of the parent of the organization (in the US the holding company) intervene and go through the proper resolution procedure. Resolution planning of major banks has also been based on this principal. Protracted negotiations of major non-US-banks with US authorities have shown that acceptance of SPE resolution requires significant safeguards for countries hosting subsidiaries. It also requires more trust than may be available in a crisis.

Negotiations about the matter have suffered from two shortcomings: First, the discussion has focused on matters such as the distribution of losses across subsidiaries in different jurisdictions. Internal TLAC may do a good job on that – we have yet to see it in practice. But the very mean of the word “systemically important” indicates that the problem is to maintain certain operations, at least for a while. Such maintenance requires funding, and it requires access to common resources, such as IT, data files, and the like. If the systemically important operations concern different jurisdictions differently, SPE poses the risk that the single authority in charge may provide such funding and such access to common resources in a biased manner, giving precedence to activities in its own jurisdiction. I have yet to see a document indicating which activities are to be maintained and how they are to be protected from chauvinistic ring-fencing by the authority in charge of resolution. The US authorities have asked for a number of guarantees for the maintenance of funding and equity; I am not convinced that, in a crisis, these guarantees will actually be honored.

Second, and related to the first point, the discussion has neglected systemically important operations that are not typical for global banks. Another way to put it, the discussion has focused on wholesale activities, investment banking activities, securities business, derivatives (?), and the like. In Europe, there are many banks with systemically important *retail* activities in multiple jurisdictions. An example is Nordea in the Scandinavian countries; other examples involve banks in Austria, Germany, Italy and their subsidiaries in the transition countries of Eastern Europe. In these cases, bank lending is systemically important for each of the affected countries, and the authorities of these countries are concerned that, under SPE, continuance of bank lending in their jurisdiction would not be assured. I have personally heard quite a number of supervisors assert that, for this reason, SPE would be out of the question for their countries.

In other words, SPE is a technocrats' design but a political pipedream.

3.2 **Funding in Resolution**

The FSB Report (p. 29) indicates that thinking about funding in resolution has not yet progressed very far and that "further work may be necessary to develop resolution funding strategies". This formulation is candidate for understatement of the year.

In Europe, the legal norms on bank resolution, Bank Recovery and Resolution Directive (BRRD) and SRM Regulation, do not contain a single word on funding in resolution. Banco Popular Español (BPE) had to be sold overnight to Banco Santander because the authorities saw this as the only way out of the dilemma caused by the run of institutional depositors (local and regional governments that banked with BPE and had funds exceeding the limits for deposit protection).

Thinking underlying the legal norms seems to have been based on the view that, on a Friday night, the authorities step in, use Saturday to value the bank's assets and liabilities and Sunday to notify the bank's shareholders and creditors about write-downs, haircuts, and conversions, with a hope that, by Monday, the bank is up and running again, clearly solvent and clearly trustworthy to new financiers, as well as incumbent financiers who have not been bailed in. This view is also a pipedream.

Valuations take more than a weekend; in the case of BPE, the auditors stated that the time from May 23, 2017, when they were called in, to the resolution date was too short to allow for more than a provisional valuation. The notion that everything is up and running again by Monday is naïve – unless one sees the certification of solvency by the resolution authority as a permit to obtain access to funding by the central bank, a matter which might end up being highly political and therefore fraught with frictions.

If it is done properly, resolution takes time. Management decisions on how to best dispose of the bank's assets and operations are not taken in a day. And the attempt to wind down a loan portfolio quickly might end up magnifying losses. For systemically important

activities, the very notion that these are to be maintained at least for a while implies a need for time. While these things are going on, the bank requires funding. It also requires access to certain markets that are essential for the continuation of certain activities.

In the US, the problem is solved by having the FDIC take over the bank, using the Treasury for (interim) funding. In Europe, there is no equivalent. The Single Resolution Fund – or the stipulated contribution of the ESM – might suffice to cover ultimate losses from the intervention, but this is much too small to provide sufficient liquidity to the likes of Deutsche Bank or BNP Paribas, with funding needs exceeding 1 trillion euros. I suspect that the enormous dimension of such potential liquidity needs was a reason why the problem was not addressed in the first place; after all, even the rather smaller amounts available to the ESM were highly controversial politically.

As long as the problem of funding in resolution is not properly addressed however, authorities will shy away from relying on bank resolution.

3.3 **Bail-ins and Valuations**

One overriding principle of resolution reform has been that losses should be borne by shareholders and by the different classes of debt holders in reverse order of their priorities. Never again would taxpayers have to provide funds to rescue banks, so the promise went. In the European Union, however, this principle has been modified by exempting some creditors from such bail-in. The principle has also been under a cloud by a second principle, according to which no creditor must be made worse off than he or she would be under an insolvency law. The inconsistencies and impracticalities in norms and procedures related to these principles stand in the way of a viable resolution regime.

The problems of the no-creditor-worse-off principle for bail-in can be illustrated by the case of BPE. The BRRD and the SRM Regulation stipulate a final valuation, whose purpose it is to assess what the different claimants would have received in an insolvency procedure and to compare these amounts with what they actually received in the bail-in decision that was part of the resolution procedure. In the case of BPE, such a final valuation (valuation 3) was de facto impossible because once the bank had been sold to Santander there was nothing left to value. Moreover the valuation that provided the basis for the bail-in of shareholders as well as Tier 1 and Tier 2 hybrid investors (valuation 2) was explicitly called provisional because the auditors had not had the time for a regular valuation. One may argue that there was nothing better to be done, but that still leaves the concern that the authorities made short shrift of the no-creditor-worse-off principle.

The difficulties have three causes: First valuations are always "as if" statements, counterfactuals for which the evidence is weak. They serve as stand-ins for actual counter-values in transactions. Second, with respect to timing and uncertainty, valuation in bail-in and counterfactual valuation with reference to an insolvency procedure do not fit together. The latter is an *ex post* concept, as the returns to claimants in an insolvency procedure are

only determined *ex post*. The former is an *ex interim* procedure, applied as resolution is triggered, quite possibly under significant uncertainty about the final outcome. For the two to be comparable, one would need *ex interim* version of valuation in an insolvency procedure, taking account of remaining uncertainty and appropriate discounts for this uncertainty. Third, all valuations under discussion depend on choices made by the persons in charge, the resolution authority or the receiver in an insolvency procedure. In the case of BPE, the sale to Santander determined definite values in a way that precludes any alternatives. In a sense the price paid by Santander was an *ex post* valuation, but one could legitimately argue that the fire sale nature of the transaction imposed an undue burden on investors who might have obtained higher reimbursements if the authority had chosen or had had been able to choose a more patient strategy for disposing of the bank. The lack of a satisfactory solution for the problem of funding in resolution that I criticized above also played an important role for the handling of valuation and bail-in of creditors. For details see my 2018 report to the European Parliament, "Valuation reports in the context of bank resolution",
https://www.europarl.europa.eu/RegData/etudes/IDAN/2018/624417/IPOL_IDA(2018)624417_EN.pdf .

The cases of Veneto Banca and Banca Popolare di Vicenza are also of interest. The Italian government has been accused of violating the spirit underlying the BRRD, namely that taxpayers should never again have to pay for banks. In fact, the arrangement under which they split the banks into "good" and "bad" parts, with an outright sale of the former to Intesa and an administration/funding agreement for the latter, also with Intesa, can be understood as a way to overcome the funding problem. For the "bad" part, the Italian government is liable for any remaining losses after the loan portfolio has been wound down, but these losses are likely to be much smaller than if no such arrangement was made and loans would have to be wound down very quickly. The required amount of bail-in was therefore smaller, probably also the overall social cost of the liquidation.

3.4 **The Role of Fiscal Backstops**

The handling of the Venetian banks raises the question of what is the role of a fiscal backstop. The FSB quotes the principle that such backstops should not be used without considering the implications of the principle. The political origins in the revulsion over the bailouts in the global financial crisis are clear, but too little attention has been paid to questions of feasibility. The Italian experience shows just on facet of this problem.

The principle of no taxpayer involvement is inconsistent with the principle that bail-in must be avoided if it involves significant systemic risk. More concretely, it is sometimes inconsistent with the exemptions granted to certain classes of investors who are deemed to be systemically important. To be sure, banks have minimum required eligible liabilities (MREL), i.e. liabilities, including equity, that are not exempt from bail-in. However, under certain conditions, these requirements are insufficient. In the case of Anglo-Irish, losses were well over 20% percent of total assets, so an exemption of 92% of claims

amounting to total assets would have been inconsistent with a full bail-in of creditors. In the case of Greek and Cypriot banks, the orders of magnitude were similar. These cases are particularly interesting because, under practices determining MREL not in relation to total assets but in an equivalent (?) relation to risk-weighted assets, the government debt that caused these banks to go under would not even have entered the requirements.

The problem is intimately linked with the funding problem. Among the investors who are exempt from bail-in are the providers of very short-term funding, in the EU, for example, short term lenders with initial maturities of less than seven days. Given the experience with the run on Reserve Primary after the Lehman bankruptcy, such an exemption makes sense. Any attempt to bail such lenders in might cause a run on money market funds and a freeze of money markets. But then, how does one deal with the possibility that these lenders get out as soon as they can? One might keep them by providing them government guarantees. Or one might replace them with central bank funding, presumably also with government guarantees to the central bank. In either case, as in the example of the Venetian banks, a fiscal backstop is needed to ensure continued funding. The fact that such a backstop has been excluded as a matter of principle contributes to the non-viability of the existing resolution regime.

In the United States, the problem is circumvented by giving the FDIC access to interim funding from the US Treasury. In principle, the FDIC must pay this money back, through industry contributions to the FDIC or through clawbacks from creditors. That arrangement, however, leaves open the possibility that industry contributions and creditor clawbacks might not be enough, so that the Treasure makes a loss after all. In the S&L crisis of the 1980s industry contributions were limited because the industry was in a crisis, and creditor clawbacks were limited because most creditors were depositors and therefore FDIC-insured. In the end, taxpayers contributed US$ 129 billion out of US$ 153 billion in losses.

3.5 **Politics**[1]

The "practical" shortcomings of the BRRD and the SRM Regulation that I have sketched are very important, but they probably are not the reason why national authorities and banks are trying to avoid resolution by all means. On the side of banks, as with all other firms, resistance against resolution is as natural as resistance against bankruptcy: As long as you are in charge, kicking the can down the road is attractive – perhaps something will come up and make the bank viable again. On the side of supervisory authorities and

[1] This section is drawn from a piece "How important is a European Deposit Insurance Scheme?", in: A. Dombret and P.S. Kenadjian (eds.), *EDIS, NPLs, Sovereign Debt, and Safe Assets*, Institute for Law and Finance Series Volume 23, De Gruyter, Berlin/Boston, 7 – 19. See also Hellwig, Banks, Politics, and European Monetary Union, in: *European Forum on Central Banking 2019: Twenty Years of European Economic and Monetary Union, Conference Proceedings*, 250 – 261.

governments, the same reflex might explain why the Spanish and the Italian authorities looked the other way when cajas and banks sold preferred stock and subordinated debt to unsophisticated retail investors; it might also explain why the German authorities procrastinated for so long on the need for HSH Nordbank, BremenLB and NordLB to acknowledge large losses on shipping loans.

The political dimension of bail-in must also be considered. For non-financial companies, the participation of creditors in losses that exceed the company's equity, is taken as a matter of course. With banks, bail-in is regarded as politically illegitimate in many polities. The Brussels-imposed bail-ins of subordinated debt in the Italian banks caused public outrage in Italy and contributed to the 2018 election results' causing a change of government. When in 2013 equity and subordinated debt in Slovenian banks were bailed in, not only was the bail-in contested in the courts, but public prosecutors started criminal investigations of the officials in charge. The bail-in of equity and subordinated debt in BPE was also contested in court.

To some extent, these developments are an example of frictions associated with the introduction of new legal rules. In law, as well as taxation, new rules are often deemed to be bad, and old rules good. From the perspective of traditional insolvency law, the very introduction of bank resolution as a separate procedure is an outrage. Whereas write-downs of equity, junior and senior debt, in reverse order of priority, are treated as natural in bankruptcy, the imposition of such write-downs outside of bankruptcy is criticized as an infringement of private property, a violation of the investors' constitutional rights.

There is more to the unrest, however, than merely the quirks of adjustment to a new set of rules. Resistance from the affected parties and their advocates resonates with the public, locally, regionally, and nationally, which is one reason why member state governments actually prefer bailouts to resolution with bail-ins. I see several reasons for the difference in reactions to creditors' losses in non-financial companies. First, whereas with non-financial companies, creditors tend to be specialists, banks or suppliers, for whom a risk of losses is deemed to be part of the business, among the creditors of banks are many ordinary people with whom the public at large finds it easier to sympathize. Second, the effect is reinforced if at least some of the debt is a result of mis-selling, especially with banks selling their own junior debt or preferred stock as perfectly riskless. Third, the outrage is further reinforced if the authorities are perceived as being co-responsible for the banks' difficulties. Such a view arises naturally in countries with a tradition of close government-bank relations, with loose supervision and banks' investments attuned to the authorities' wishes. If the authorities have tolerated the mis-selling of risky claims by banks, the outrage will be that much greater.

In summary, the very small number of actual resolution procedures that have taken place should be interpreted as a warning that many important participants have not yet accepted resolution as a legitimate procedure for dealing with problem banks.