Daniel K Tarullo: Confronting "too big to fail"

Speech by Mr Daniel K Tarullo, Member of the Board of Governors of the US Federal Reserve System, at the Exchequer Club, Washington DC, 21 October 2009.

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The far-reaching financial crisis that has afflicted our country in the past two years has drawn attention to a raft of problems – from the concentration of commercial real estate exposures in some regional and community banks, to the risks associated with some forms of derivatives, to the need for more vigorous financial services consumer protection. Proposals for administrative and congressional responses are thus appropriately diverse. I would suggest, however, that the reform process cannot be judged a success unless it substantially reduces systemic risk generally and, in particular, the too-big-to-fail problem. This afternoon I will address my remarks specifically to the task of forging an effective response to this problem.[1]

The current form of the too-big-to-fail problem

The concern is hardly a new one. In one manifestation, too big to fail was an extension of the classic problem of bank runs and panics. If a large bank failed – whether because it was illiquid after a deposit run or insolvent after severe losses – the entire banking system might be endangered. In cases in which other banks held significant deposits in the distressed institution, the failure of a large bank might lead directly to the illiquidity or insolvency of other banks. The result could be a domino effect in the interbank lending market, with one bank's failure toppling the next. Even where direct losses to other banks were thought manageable, the failure of a large bank might strike panic into depositors, especially uninsured depositors, of other large institutions. The result might be a far-reaching run on the entire banking system that could, in a worst case such as occurred in early 1933, freeze the financial system completely.

Faced with either variant of such a devastating impact on the system, government authorities often believe they have little choice but to intervene. The government may provide funds or guarantees to the bank in order to keep it functioning. Alternatively, the government may allow the bank to fail, but shield some or all of its depositors from loss, even those not covered by existing insurance programs. In 1984, for example, the Federal Deposit Insurance Corporation protected the uninsured depositors of Continental Illinois Bank, then the nation's seventh largest depository institution, after a foreign depositor run that followed heavy losses.

One concern arises from the effects on incentives of bank creditors and, possibly, the banks themselves. Creditors who believe that an institution will be regarded by the government as too big to fail may not price into their extensions of credit the full risk assumed by the institution. That, of course, is the very definition of moral hazard. Thus the institution has funds available to it at a price that does fully internalize the social costs associated with its operations. The consequences are a diminution of market discipline, inefficient allocation of capital, the socialization of losses from supposedly market-based activities, and a competitive advantage for the large institution compared to smaller banks.

The management and shareholders of the too-big-to-fail institution may, in turn, regard themselves as holding a kind of put option and may thus be motivated to take greater risks

[1] The views expressed here are my own, and do not necessarily reflect those of other members of the Board of Governors of the Federal Reserve.

with the cheaper funds now available to them. If the risky projects pay off, the shareholders profit famously. If the results are bad, the government may keep the institution afloat, thereby preserving at least some value for shareholders.

The roots of the present crisis – and thus of the current form of the too-big-to-fail problems – reach much deeper than the breakdown of private risk management and shortcomings of government regulation during the first part of this decade. Its origins lie in 30 years of change in the organization of financial firms and markets that squeezed the traditional business model of commercial banking. The regulatory system accommodated the growth of capital market alternatives to traditional financing by relaxing many restrictions on the type and geographic scope of bank activities, and virtually all restrictions on affiliations between banks and non-bank financial firms. The result was a financial services industry dominated by one set of very large financial holding companies centered on a large commercial bank and another set of very large financial institutions not subject to prudential regulation.

Many firms of both types relied for a considerable portion of their financing on short-term capital market sources that were often poorly matched with the maturity structure of a firm's assets. Securitization markets were a major part of these complex, tightly wound financial arrangements. When questions arose about the quality of assets held by the borrowing institutions, a classic adverse feedback loop ensued. With lenders increasingly unwilling to extend credit against these assets, liquidity-strained institutions made increasingly distressed asset sales, which placed additional downward pressure on asset prices, leading to margin calls for leveraged actors and mark-to-market losses for all holders of the assets.

As shown by the intervention of the government when Bear Stearns, AIG, Fannie Mae, and Freddie Mac were failing and by the repercussions from the bankruptcy of Lehman Brothers, the universe of financial firms that appeared too big to fail by 2008 included more than the insured depository institutions subject to prudential regulatory requirements. It is noteworthy that, prior to the start of the crisis, relatively few market observers would likely have identified Bear Stearns as so systemically important that it could not be permitted to fail in a "disorderly" fashion. Indeed, some observers counseled letting the firm enter bankruptcy. The extension of funds by the Treasury Department from the Troubled Asset Relief Program and guarantees from the Temporary Liquidity Guarantee Program to each of the nation's largest institutions in the fall of 2008 revealed the government's view that a very real threat to the nation's entire financial system was best addressed by shoring up the nation's largest financial firms.

The government-arranged and subsidized absorption of Bear Stearns into JPMorgan Chase draws attention to two additional features of the too-big-to-fail problem. First, no matter what its general economic policy principles, a government faced with the possibility of a cascading financial crisis that could bring down its national economy tends to err on the side of intervention. Second, once a government has obviously extended the reach of its safety net, moral hazard problems are compounded, as market actors may expect similarly situated firms to be rescued in the future. Both these observations underscore the importance of adopting robust policies in non-crisis times that will diminish the chances that, in some future period of financial distress, a government will believe it must intervene to prevent the failure of a large financial institution.

A program to contain the problem

Moral hazard is, if not quite pervasive, certainly common in modern economic life. The best evidence that we are willing to live with some degree of moral hazard may be found in the importance of insurance as a social institution. The costs that would be incurred in trying to eliminate moral hazard completely from, say, a casualty insurance policy are simply too high as a practical matter. Similarly, we should not realistically expect to eliminate moral hazard completely in the financial sector. What we *can* reasonably expect and, indeed, should insist upon, is that we take steps to contain the problem such that the social costs associated with the consequences of the misaligned incentives do not exceed the benefits associated with the operation of the institutions or markets in which the moral hazard exists.

Parallel reasoning applies with respect to the negative effects that may attend the failure of a large financial institution. Efforts should be made to reduce those effects, but in such a way that takes account of the costs that these efforts may themselves impose on productive activities. In the financial arena, the trade-off is often characterized as one between the availability and efficient allocation of credit, on the one hand, and the safety and soundness of the financial system on the other.

The conventional response to moral hazard problems arising from anticipated government support for financial actors has been to enact regulation to counteract unwelcome effects on the incentives of creditors, investors, or managers. Thus, for example, the potential moral hazard arising from the availability of discount window lending or from the presence of federal deposit insurance is offset to some degree through safety and soundness regulation. Likewise, the potential for large negative externalities from a firm's activities is often countered with regulation designed to force some measure of social cost internalization by the firm.

A regulatory response for the too-big-to-fail problem would enhance the safety and soundness of large financial institutions and thereby reduce the likelihood of severe financial distress that could raise the prospect of systemic effects. Such a response consists of three elements.

First, the shortcomings of the regulations that failed to protect the stability of the firms and the financial system need to be rectified. Regulatory capital requirements can balance the incentive to excessive risk-taking that may arise when there is believed to be government support for a firm, or at least some of its liabilities. There is little doubt that capital levels prior to the crisis were insufficient to serve their functions as an adequate constraint on leverage and a buffer against loss. The Federal Reserve has worked with other U.S. and foreign supervisors to strengthen capital, liquidity, and risk-management requirements for banking organizations. In particular, higher capital requirements for trading activities and securitization exposures have already been agreed. Work continues on improving the quality of capital and counteracting the procyclical tendencies of important areas of financial regulation, such as capital and accounting standards.

These regulatory changes are surely a necessary part of a response to the too-big-to-fail problem, but there is good reason to doubt that they are sufficient. Generally applicable capital and other regulatory requirements do not take account of the specifically systemic consequences of the failure of a large institution. It is for this reason that many have proposed a *second* kind of regulatory response – a special charge, possibly a special capital requirement, based on the systemic importance of a firm. Ideally, this requirement would be calibrated so as to begin to bite gradually as a firm's systemic importance increased, so as to avoid the need for identifying which firms are considered too-big-to-fail and, thereby, perhaps *increasing* moral hazard.

While very appealing in concept, developing an appropriate metric for such a requirement is not an easy exercise. There is much attention being devoted to this effort – within the U.S. banking agencies, in international fora, and among academics – but at this moment there is no specific proposal that has gathered a critical mass of support.

A *third* regulatory change is in some respects the most obvious and straightforward: Any firm whose failure could have serious systemic consequences ought to be subject to regulatory requirements such as those I have just described. At present, these apply only to firms that own a commercial bank – a regulatory gap that became painfully evident last year as systemic problems arose from the activities of other firms. Although the five large, "free-standing" investment banks of early 2008 have subsequently either converted to bank holding company status or ceased operations as independent firms, action by Congress is needed to ensure that other firms posing such a risk – now or in the future – can be brought within the perimeter of regulation.

This regulatory agenda has much to be said for it and should, I believe, be vigorously pursued. But I doubt that rules directed at the conduct of financial firms will be an adequate response to the too-big-to-fail problem. In the first place, there is some danger that simply piling on a series of administrative reforms and restrictions intended to constrain the behavior of firms would have unnecessarily adverse consequences for the availability of credit on risk-sensible terms for consumers and businesses alike. The interaction of regulatory changes needs to be thought through. Also, the financial crisis should itself inject a considerable dose of humility into regulators' assessment of the efficacy of even well-considered regulations. Rules directed at the behavior of large firms must be complemented with reforms directed at the behavior of their investors and counterparties.

An agenda to enhance market discipline can serve two purposes. First, establishing the realistic prospect of losses for investors and counterparties in a large financial institution should change their calculations in deciding whether to enter a transaction with the firm, and thus lead to a more complete incorporation of risk into the terms of such a transaction. Second, the assessment of that risk by these financial actors, as reflected in the pricing of their investments and contracts with a firm, can itself provide valuable information to regulators.

While the role of market discipline has been much discussed in academic and policy literature as a potentially central element of a financial regulatory system, it had not been significantly developed and implemented by regulators themselves. The crisis has pushed some market discipline ideas to the fore. Here again, I think there are three important measures.

First would be creation by Congress of a special resolution procedure for systemically important financial firms. The Federal Deposit Insurance Act establishes such a process for banks, but not for the holding companies of which they are part, or for important financial firms that do not own commercial banks. A regime that raised the real prospect of losses for shareholders and creditors would add a third alternative to the unattractive existing options of bailout or disorderly bankruptcy. The consequent increase in market discipline before severe financial distress arises could be a key advance in the containment of the too-big-to-fail problem.

A related innovation would be a requirement that each major financial institution draw up and submit for approval to its supervisors a plan for orderly wind-down in the event of serious liquidity or solvency difficulties. Although even a good faith effort might not anticipate all the circumstances that may raise such difficulties, and thus might not adequately prepare an effective wind-down strategy, the development of such a plan would at the least be a useful supervisory exercise. It would, for example, provide an occasion for examining the relationships among the many separate corporate entities within a large financial organization.

A *second* kind of market discipline initiative is a requirement that large financial firms have specified forms of "contingent capital." Numerous variants on this basic idea have been proposed over the past several years. While all are intended to provide a firm with an increased capital buffer from private sources at the moment when it is most needed, some also hold significant promise of injecting market discipline into the firm. For example, a regularly issued special debt instrument that would convert to equity during times of financial distress could add market discipline both through the pricing of newly issued instruments and through the interests of current shareholders in avoiding dilution.

A *third* improvement in market discipline could come through judicious extension of disclosure requirements for regulated financial institutions. Disclosure requirements have at times served as too easy an answer to calls for market discipline. Indeed, poorly crafted requirements can simultaneously impose significant costs on firms while providing little useful information to investors. However, an organized inquiry of actual and potential investors might identify discrete categories of information thought to have particular salience for purchase and pricing decisions. There may be a need to resolve issues of potential competitive harm to firms required to publish certain forms of information. Still, such an effort seems worth pursuing, especially in conjunction with specific proposals for contingent capital or similar requirements.

Alternatives

The foregoing set of administrative and legislative proposals constitutes a strong reform program to address the too-big-to-fail problem, particularly as supplemented by the greater emphasis on horizontal reviews, creation of a quantitative surveillance mechanism, and other supervisory changes being implemented at the Federal Reserve.[2] Along with our domestic and international colleagues, we are already working on many of these initiatives. We are hopeful that Congress will, in its legislative response to the crisis, include a resolution mechanism and an extension of regulation to all systemically important financial institutions.

Still, we cannot know for certain that this program, even if forcefully implemented, would substantially contain the too-big-to-fail problem. All participants in the reform process must continue to explore other possibilities, including some that would work more fundamental changes in the structure of the financial industry.

One approach suggested by a number of commentators is to reverse the 30-year trend that allowed progressively more financial activities within commercial banks and more affiliations with non-bank financial firms. The idea is presumably to insulate insured depository institutions from trading or other capital market activities that are thought riskier than traditional lending functions. There are, however, at least two reasons why this strategy seems unlikely to limit the too-big-to-fail problem to a significant degree. One is that, historically at least, some very large institutions got themselves into a good deal of trouble through risky lending alone. Moreover, as we have already seen in the experience with Bear Stearns and Lehman, firms without commercial banking operations can now also pose a too-big-to-fail threat.

Another approach would be to attack the bigness problem head-on by limiting the size or interconnectedness of financial institutions. Some observers have even suggested that existing large firms should be split up into smaller, not-too-big-to-fail entities, in a manner a bit reminiscent of the break-up of AT&T in the early 1980s. Of course, the conceptual and practical challenges in breaking up the nation's largest financial institutions would be considerably more daunting than those faced by Judge Greene in creating four regional operating companies and a long distance carrier out of the old AT&T. Indeed, to my knowledge, no one has offered anything like standards for undertaking this task, much less a blueprint for how it would be accomplished. This is, in other words, more a provocative idea than a proposal. Like many a provocative idea, though, even in an unelaborated form it can focus attention on the relative effectiveness of alternative policy proposals.

The fact that the largest financial firms will account for a significantly larger share of total industry assets after the crisis than they did before can only add to the uneasiness of those worried about the too-big-to-fail phenomenon. It is notable that current law provides very little in the way of structural means to limit systemic risk and the too-big-to-fail problem. The statutory prohibition on interstate acquisitions that would result in a commercial bank and its affiliates holding more than 10 percent of insured deposits nationwide is the closest thing to

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[2] See Daniel K. Tarullo (2009), "Bank Supervision," statement before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, August 4.

such an instrument.[3] Policymakers and policy commentators alike might usefully attempt to develop similarly discrete mechanisms that could be beneficial in containing the too-big-to-fail problem. As must be apparent from my remarks today, my strong suspicion is that an effective response to the problem will likely require multiple, mutually reinforcing instruments.

Conclusion

In closing, let me reiterate the importance of moving ahead with the administrative and legislative reform agenda that I have laid out this afternoon. The components of this agenda will each be significant contributions to a more effective regulatory system. They will enhance financial stability and increase market discipline in transactions involving large financial firms.

Of course, financial instability can occur even in the absence of serious too-big-to-fail problems. Other reform measures – such as regulating derivatives markets and money market funds – are thus also important to pursue. In focusing today upon measures to mitigate too-big-to-fail problems, I mean only to suggest that no reform package should be considered sufficient if it does not address these problems in a robust fashion. And in suggesting that policymakers should continue to examine possible measures beyond the current reform agenda, I certainly do not intend to suggest that the current agenda should be delayed. I only urge that we all keep the too-big-to-fail problem front and center as the regulatory reform effort moves forward.

[3] 12 U.S.C. § 1842(d).