# Daniel K Tarullo: Financial regulation – past and future

Speech by Mr Daniel K Tarullo, Member of the Board of Governors of the US Federal Reserve System, at the Money Marketeers of New York University, New York, 9 November 2009.

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Systemic crises typically reveal failures across the financial system. The crisis that unfolded over the past two years is no exception, with fundamental problems apparent in both the private and public sectors. There were massive failures of risk management in many financial firms and serious deficiencies in government regulation of financial institutions and markets. But the breadth and depth of the financial breakdown suggest that it has much deeper roots. In many respects, this crisis was the culmination of changes in both the organization and regulation of financial markets that began in the 1970s. An appropriately directed response must build on an understanding of this history.

In my remarks this evening I will begin by reviewing the origins of the crisis, as a prelude to discussion of the elements of a reform agenda that I believe to be reasonably clearly established. I will close with some thoughts on the very important question of whether additional regulatory methods will be necessary to provide the foundation for a stable and efficient financial system.<sup>1</sup>

## The origins of the crisis

Shortly after President Franklin Roosevelt's inauguration in 1933, Congress enacted sweeping new measures that would define financial regulation for decades. The creation of the Federal Deposit Insurance Corporation (FDIC) countered the problem of bank runs and panics by insuring the bank accounts of the vast majority of Americans. Along with preexisting restrictions in the National Banking Act and state laws, the Glass-Steagall Act established a regulatory system that largely confined commercial banks to traditional lending activities within a circumscribed geographic area. At the same time, the Securities Act of 1933 and the Securities Exchange Act of 1934 brought increased transparency and accountability to the trading and other capital market activities that were now essentially separated from commercial banking.

This regulatory approach fostered a commercial banking system that was, for the better part of 40 years, quite stable and reasonably profitable, though not particularly innovative in meeting the needs of depositors and borrowers. The new FDIC insurance, the 1933 statutory prohibition of interest payments on demand deposits, and the Fed's Regulation Q upper limit on interest rates paid on savings deposits had together suppressed competition for deposits among banks and made retail deposits a highly stable source of relatively attractive financing.

The turbulent macroeconomic developments of the 1970s, along with technological and business innovations, helped produce an increasingly tight squeeze on the traditional commercial banking business model. The squeeze came from both the liability side, in the form of more attractive savings vehicles such as money market funds, and from the asset side, with the growth of public capital markets and international competition. The large commercial banking industry that saw its lending to large and medium-sized corporations threatened by their increasing access to public capital markets sought removal or relaxation of the regulations that confined bank activities, affiliations, and geographic reach. While

<sup>&</sup>lt;sup>1</sup> The views expressed are my own and not necessarily those of other members of the Board of Governors.

supervisors differed with banks on some important particulars, they were sympathetic to this industry request, in part because of the potential threat to the viability of the traditional commercial banking system.

The period of relative legal and industry stability that had followed the 1933 legislation thus gave way in the 1970s to a nearly 30-year period during which many prevailing restrictions on banks were relaxed. A good number were loosened through administrative action by the banking agencies, but regular and important statutory measures headed in the same direction. This legislative trend culminated in the Gramm-Leach-Bliley Act of 1999, which consolidated and extended the administrative changes that had allowed more extensive affiliations of commercial banks with investment banks, broker-dealers, merchant banks, and other financial firms. By the turn of the century, the Depression-era cluster of restrictions on commercial banks had given way to a regulatory environment in which they could operate nationally, conduct a much broader range of activities within their own operations, and affiliate with virtually any kind of financial firm.

These changes enabled a series of acquisitions that resulted in a number of very large, highly complex financial holding companies centered on a large commercial bank. At the same time, independent investment banks had grown into a group of very large, complex, and highly leveraged firms. Of course, financial engineering had been rapidly changing the character of the financial services sector as a whole. Securitization and associated derivative instruments were merging capital markets and traditional lending activities, fueling the growth of what has become known as the shadow banking system. Financial institutions relied for a significant portion of their financing on short-term capital market sources that were often poorly matched with the maturity structure of the firm's assets. As a result, both the asset mix and sources of funding of many financial firms had shifted dramatically.

The regulatory system had also evolved, notably through progressively more detailed capital requirements and increasing demands that banking organizations enhance their own risk-management systems. Supervisors counted on capital and risk management to be supple tools that could ensure stability even as financial activities changed rapidly. Truthfully, though, there was no wholesale transformation of financial regulation to match the dramatic changes in the structure and activities of the financial industry. In particular, the regulatory system did not come close to adequately accounting for the impact of trading, securitization, and some other capital market activities on both traditional banking and systemic risk.

The consequences of this neglect were dramatic. When questions arose about the quality of the assets on which the shadow banking system was based – notably poorly underwritten subprime mortgages – 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, thereby accelerating margin calls for leveraged actors and amplifying mark-to-market losses for all holders of the assets. The margin calls and booked losses would start another round in the adverse feedback loop.

Meanwhile, as shown by the intervention of the government when Bear Stearns and AIG were failing, and by the repercussions from the failure of Lehman Brothers, the universe of financial firms that appeared too-big-to-fail during periods of stress included more than insured depository institutions and extended beyond the perimeter of traditional safety and soundness regulation. The extension of funds by the Treasury Department from the Troubled Asset Relief Program (TARP) and guarantees by the FDIC 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 agenda for reform

The need for a thorough overhaul of the financial regulatory system is thus borne out not only by our frighteningly close brush with financial collapse in the fall of 2008, but also by the degree to which too-big-to-fail perceptions and capital-market sources of systemic risk had been permitted – if not encouraged – by regulatory developments in the preceding decades. A post-crisis reform program will ultimately be judged adequate only if it addresses these problems head-on. A reform agenda aimed at these problems has, in fact, taken shape this year, although important components remain the subject of active debate. Let me take a few minutes to set forth the outlines of that agenda, which includes both changes by financial regulatory agencies acting under their existing authority and new legislation.

The first important item on the reform agenda is to extend the perimeter of regulation so that any firm whose failure could have serious systemic consequences will be subject to consolidated supervision, including minimum capital and liquidity requirements. As last year's events showed, systemic problems can arise from the activities of non-banking firms but, under present law, these requirements apply only to firms owning a commercial bank. Indeed, there is an incentive to shift riskier activities into unregulated firms.

A second item is to strengthen the prudential rules applicable to supervised institutions. This component of a reform program has manifold elements. There is little doubt that capital levels prior to the crisis were insufficient to serve as an adequate buffer against loss and constraint on leverage, particularly in some of the largest financial institutions. Working with our counterparts in the Basel Committee on Banking Supervision, U.S. supervisory agencies have already increased capital requirements for trading activities and securitization exposures, two of the areas in which losses were especially high. We are moving toward agreement on modifying existing rules to improve the quality of capital used to satisfy minimum capital rules, with a particular emphasis on the importance of common equity.

Liquidity issues have rightly garnered considerable attention in the aftermath of the crisis. It has always been recognized that a solvent financial institution can be brought down by liquidity problems. That, of course, is one traditional justification for reserve requirements. But the tightly wound, often complex channels of financing characteristic of the shadow banking system, including the wholesale funding practices of many regulated institutions, simply outraced conventional liquidity risk management assumptions. The bank regulatory agencies are implementing strengthened guidance on liquidity risk management and weighing proposals for quantitatively based requirements.

A third part of the reform agenda is to use market discipline more effectively as a regulatory and supervisory tool. Too-big-to-fail perceptions weaken normal market disciplinary forces by producing a distorted set of incentives in which counterparties of a large institution may not price into their extensions of credit the full risks assumed by the institution. The management and shareholders of the too-big-to-fail institution may regard themselves as holding a put option and may, accordingly, be motivated to take greater risks with the cheaper funds now available to them. The assumption, of course, is that the government will bail out a large firm encountering severe distress, to preclude potential contagion from the direct or indirect effects of a disorderly bankruptcy. The enormous concerns with this moral hazard effect explain the focus in current reform proposals on a special resolution procedure that raises the real prospect of losses for shareholders and creditors of even the largest financial firms.

The fourth item on the current reform agenda is to increase the effectiveness of the consolidated supervisory process, particularly for the largest institutions. In the years preceding the crisis, bank holding company supervision was principally focused on protecting the commercial banks within a holding company. Too little attention was paid to the risks faced, and created, by the entire holding company, including affiliates principally involved in trading and other capital market activities. This weakness may be partially explained by the supervisory approach embedded in the Gramm-Leach-Bliley Act, with its emphasis on the functional supervision of affiliates in a holding company. But it was also the case that not

enough supervisory scrutiny was given to the risks associated with securitization, the common exposures of different affiliates, and the implications of the explosion of off-balance-sheet assets.

This is an especially appropriate moment to describe what the Federal Reserve is doing to reorient the supervision of large institutions, since today we announced results of the implementation of the capital plans formulated last spring as part of the special Supervisory Capital Assessment Program (SCAP). As you will recall, the unprecedented SCAP process was begun last February, during one of the darkest periods of the financial crisis. Led by the Federal Reserve, a multidisciplinary team from the bank regulatory agencies assessed the amount of capital that would be needed by the 19 largest bank holding companies to withstand losses in an adverse stress scenario through 2010, and still remain sufficiently capitalized to meet the needs of their creditworthy borrowers.

In May we publicly released the results of that assessment. Ten of the firms needed additional capital. By early June they had each submitted plans for realizing the specified capital buffers. Today was the deadline for implementing these plans. As we announced earlier in the day, nine of the 10 bank holding companies that were determined to need the raise, or improve the quality of, their capital have met or exceeded their required capital buffers. The tenth firm, GMAC, is expected to meet its buffer by accessing the TARP Automotive Industry Financing Program administered by the U.S. Treasury. These institutions have increased common equity by more than \$75 billion, mostly through issuance of new shares, conversions of preferred to common stock, and sales of businesses and assets.

The immediate effect of the completion of the assessment phase of SCAP was to provide important information about the condition of the 19 institutions at a time of substantial stress and uncertainty in financial markets. The SCAP clearly helped to restore public confidence in the banking system. Through its demonstration of the importance of individual assessments of firms' capital needs, improved management information systems in complex firms, and horizontal reviews of large institutions, SCAP will also have longer-lasting effects on the supervision of large institutions.

One particularly important byproduct of the SCAP was a renewed supervisory focus on institutions' ability to assess their own capital adequacy – specifically their ability to estimate capital needs and identify available capital resources during very stressful periods. The uncertainty associated with capital needs in such periods is one among numerous reasons for firms to maintain substantial capital buffers. However, to the degree that firms cannot demonstrate their capacity to conduct rigorous internal capital assessments, supervisors will demand even higher capital cushions. SCAP revealed significant deficiencies in the information and quantitative risk assessment capabilities of some firms. Currently, we are conducting a horizontal assessment of internal processes that evaluate capital adequacy at the largest U.S. banking organizations, focusing in particular on how shortcomings in fundamental risk management and governance impair firms' abilities to estimate capital needs for their specific exposures and activities.

The Federal Reserve is also putting in place a permanent quantitative surveillance mechanism for the large, complex financial organizations we supervise. This mechanism will incorporate supervisory information, firm-specific data analysis, and market-based indicators to identify developing strains and imbalances that may affect multiple institutions, as well as emerging risks to specific firms. The work will be performed by a multidisciplinary group composed of economic and market researchers, supervisors, market operations specialists, and accounting and legal experts. Periodic scenario analyses will be used to evaluate the potential impact of adverse changes in the operating environment on individual firms and on the system as a whole. This program will be distinct from the activities of on-site examination teams, so as to provide an independent supervisory perspective, as well as to complement the work of those teams. It will provide both improved microprudential supervision of the

largest institutions and a foundation for a macroprudential dimension in our supervisory activities.

### Supplementing the reform agenda

The administrative and proposed legislative measures I have discussed present a strong set of reforms around which a consensus seems to be developing, at least in general terms. But many participants in the public policy debate on regulatory reform believe that more will need to be done to ensure the safety and soundness of financial institutions, guard against systemic risk, and substantially contain the too-big-to-fail problem.

Some additional potential regulatory devices are already under active consideration, both among U.S. bank supervisors and in international forums. These include proposals to create special charges on firms based on their systemic importance, to require contingent capital that would be available in periods of stress, and to counter pro-cyclical tendencies by establishing special capital buffers that would be built up in boom times and drawn down as conditions deteriorate. Each of these ideas has substantial appeal. A number of thoughtful proposals are being discussed, though each idea presents considerable challenges in the transition from good idea to fully elaborated regulatory mechanism.

Yet to gain traction are proposals for what might be termed structural measures – that is, steps that would directly affect the nature and organization of the financial services industry. But discussion of such concepts is clearly increasing.

One suggested approach 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, although separating trading from hedging and other prudent practices associated directly with lending is not an altogether straightforward proposition.

In any case, this strategy would seem unlikely to limit the too-big-to-fail problem to a significant degree. For one thing, some very large institutions have in the past encountered serious difficulties through risky lending alone. Moreover, as shown by Bear Stearns and Lehman, firms without commercial banking operations can now also pose a too-big-to-fail threat. Still, imposition of higher capital and liquidity requirements for riskier trading and other capital market activities can, if well devised and implemented, achieve some of what proponents of this approach seem to have in mind.

Another approach is to attack the bigness problem head-on by limiting the size of financial institutions. 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 such an instrument. Policy commentators might usefully attempt to develop similarly discrete mechanisms that could be beneficial in containing the too-big-to-fail problem.

This exercise would, at a minimum, require development of valid and administrable standards for judging when systemic risk or too-big-to-fail problems would be materially increased, as well as a more complete understanding of what efficiencies attach to very large or complex financial institutions, and thus what social benefits might be lost by limiting or reducing their size. Thus considerable work would need to be done before evaluating the promise of these ideas. But, as I have said before, further elaboration of these ideas could be very useful in advancing our understanding of the dimensions of the too-big-to-fail problem.

## Conclusion

In closing, let me reiterate the importance both of moving ahead with the administrative and legislative reform agenda that I described earlier and of continuing investigations of complementary or alternative regulatory approaches. These inquiries into possible alternatives should not be used as an excuse to delay consideration of current legislative proposals. But the justifiable focus of policymakers on achieving these administrative and legislative changes should not crowd out open-minded consideration of additional measures.