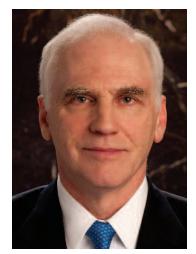
The Man To See



Dan Tarullo

An exclusive interview with Dan Tarullo, the Federal Reserve board member who is fast becoming Washington's bank regulatory czar.



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TIE: What is the Fed trying to achieve with regulatory reform? What's the end game?

Tarullo: The Federal Reserve has manifold regulatory responsibilities, which on net increased as a result of Dodd-Frank. We should be, and we are, committed to carrying out each one of those responsibilities in accordance with congressional intentions. However, since we do have a good bit of discretion in carrying out many of our statutory duties, we have some opportunity to shape the post-crisis regulatory terrain. To some extent, of course, the change needed from the pre-crisis period was simply to adopt a more robust regulatory and supervisory approach-to raise required capital levels, to plug some of the gaps that allowed some firms to take on so much risk, things of that sort. More broadly, though, I think that we must reorient our regulatory and supervisory reforms beyond traditional concern with the soundness of individual banking organizations towards safeguarding financial stability through the containment of systemic risk.

Two major threats to financial stability were revealed by the crisis. First was the problem of too-big-to-fail financial firms, both those that had been inadequately regulated within the perimeter of prudential rules and those like the large, free-standing investment banks that lay outside that perimeter. Second was the problem of credit intermediation partly or wholly outside the limits of the traditional banking system, particularly short-term wholesale funding. This so-called shadow banking system involved not only sizeable financial institutions, but also a host of smaller firms active across a range of markets and a global community of institutional investors. This system grew rapidly and then broke down even more rapidly when investors questioned the value of the mortgage-backed securities that served as collateral for so much of this funding.

To date, post-crisis regulatory reforms have concentrated on the too-big-to-fail problem, and more generally on enhancing the resiliency of the largest financial firms. We have proposed tougher prudential regulations on and supervision of large banking firms, including enhanced risk-based capital and leverage requirements, liquidity requirements, single-counterparty credit limits, stress testing, and an early remediation regime. We have revamped our supervision of the largest bank holding companies to include much more data and systematic analysis, as well as to include the perspectives of our financial, macroeconomic, and market experts to supplement traditional supervisory activities. We are also supporting the efforts of our colleagues at the Federal Deposit Insurance Corporation to build out their new statutory authority to resolve systemically important financial firms. The work on too-big-to-fail is not finished by any means, but it is well underway.

The picture is different with respect to the vulnerability associated with heavy reliance on short-term wholesale funding. The Dodd-Frank Act improves the transparency and stability of the over-the-counter derivatives markets and strengthens the oversight of financial market utilities and other critical parts of our financial infrastructure, steps that can help given the central role of dealers in these markets. Strengthened capital and liquidity standards for prudentially regulated institutions should also help by giving increased assurance to counterparties about the soundness of these firms. The Federal Reserve is also using its supervisory authority over the key clearing banks to reduce the risks associated with the tri-party repo market. And it is very important that the Securities and Exchange Commission, and now the Financial Stability Oversight Council, address the vulnerability of money market funds to destabilizing runs.

But no matter how effective the regulation of particular classes of institutions, in periods of high stress, with substantial uncertainty as to the value of important asset classes, questions about liquidity and solvency could still arise. In fact, the supposed low-risk lending transactions—typically secured by apparently safe assets—that dominate the shadow banking sys-

> The bank holding company model—if anything—has become more relevant.

tem are likely to be questioned only in a period of high stress. This systemic effect can materialize even if no firm is individually considered too big to fail. In this area, then, a good deal more remains to be done in developing an agenda for reform.

TIE: You and your colleagues should be congratulated for addressing the issue of foreign bank operations in the United States, and the important systemic implications for the global economy. Under the Fed's new rules, foreign financial firms above a certain asset size operating in the United States must form an intermediate holding company (IHC) to structure their activities. Although this approach would help equate most foreign banking organizations with U.S. firms at least structurally, the new rules would still, in many cases, leave IHCs as subsidiaries of universal banks abroad. U.S. bank holding companies might still argue that foreign banking organizations can access central bank funding and other types of support more advantageously than domestic firms. What do you think about this issue? Is this a fair approach?

Tarullo: Achieving full competitive equity among internationally active banks has always been complicated by the diversity of bank regulatory approaches around the world, not to mention differences in accounting, tax, and other government policies. In each country some of these policies probably advantage domestic banks somewhat while other policies probably disadvantage the same banks somewhat. I would also note that banks are sometimes reluctant to take advantage of apparently helpful liquidity or capital from central banks or government treasuries because of possible adverse signaling effects.

Some policies, however, are particularly important from both financial stability and competitive equity perspectives. Minimum capital requirements are right at the top of this list. That's why we have been so concerned with information, including some initial work by the Basel Committee, that suggests the risk-weighting of similar exposures for capital ratio calculation purposes sometimes varies substantially from bank to bank and from country to country. If, as I expect, more detailed inquiry reinforces these initial findings, the Basel Committee will need to address this problem.

The proposed rules on foreign banking organizations issued by the Board in December generally apply the enhanced prudential standards to the U.S. operations of foreign banking organizations, rather than require implementation in the home country. These standards—covering capital, liquidity, counterparty exposure, and other measures—are required by Dodd-Frank for all banking organizations with more than \$50 billion in assets. The approach we have proposed for foreign banking organizations will help ensure that the U.S. operations of both U.S. banking organizations and All this is not to say that

the Federal Reserve does not pay

close attention to global asset values.

foreign banks are subject to consistent standards and avoid extraterritorial application of the U.S. requirements. It also reflects the fact that the scope and scale of foreign banking operations in the United States—and thus the risks to the U.S. financial system associated with them—have grown enormously in the last fifteen years or so.

TIE: Will there be tighter product restrictions on foreign financial branch activities that are not organized as IHCs? How does the Fed plan to treat state-owned and state-controlled banking organizations under its new rules? How do you define U.S. assets when setting guidelines for foreign banks?

Tarullo: The proposed rules would not impose new restrictions on particular products for any U.S. entities of foreign banks, including branches; but the proposal would treat certain activities more strictly than in the past, such as a reliance on wholesale short-term funding and certain other capital markets activities.

Whether a particular foreign banking organization is or is not state-owned generally is not a factor used to tailor prudential standards in the proposed rules. The same set of enhanced prudential standards generally would apply to similarly situated U.S. operations of foreign banking organizations, regardless of whether their ultimate parent is an individual, a corporation, or a sovereign entity. Supervisors will continue to assess regularly the financial condition of the ultimate parent of foreign banking organizations, as well as any other special characteristics of that parent entity that could impact the safety and soundness of its U.S. operations.

TIE: Many problems during the recent financial crisis were related to structured investment vehicles (SIVs) off the balance sheets of banking organizations. These vehicles were established by banking organizations to purchase mortgages for securitization and fund themselves through the commercial paper market. Although those activities were not technically controlled by the banks that created them, they were able to finance themselves as if they had access to the Fed window. Many money market mutual funds purchased

SIV commercial paper since regulators tolerated these securities as safe monetary instruments. Will new Fed rules address this issue? Or are we witnessing an era in which the more things change, the more they stay the same?

Tarullo: The history of SIVs during the crisis is a particularly unhappy one. Although the banking institutions played a role in structuring these intermediaries, they were designed to be "bankruptcy remote" and in other ways sufficiently separate to not require consolidation with the balance sheet of the financial institution. But these bank "sponsors" were often understood by investors to be vouching in some fashion for the quality of these other intermediaries. Where this kind of support was given explicitly and contractually—in the form of credit enhancements or liquidity backstops—there was at least some capital requirement for the supporting bank, albeit an insufficient one. Where, as in the case of SIVs, the support was implicit, investors still believed (rightly, in almost all cases) that a sponsor would not allow one of these vehicles to fail, given the possible consequences for its own reputation.

Both contractual and discretionary support by sponsors for SIVs and other off-balance sheet vehicles proved problematic in the crisis. Such support was viewed by investors as positive—until the point in time when concerns were raised about the health of the overall core banking system. At that juncture, the realization that what had been viewed as "nonbank" intermediation was in fact closely tied to the core banking system further eroded confidence in the sponsoring institutions.

Several regulatory changes addressed the issue of sponsor support by financial institutions for SIVs and similar intermediaries. The Financial Accounting Standards Board finalized a rule in 2009 that requires special purpose entities used in securitizations and structured finance activities to be consolidated onto the sponsoring bank's balance sheet much more frequently, including when there is high likelihood of discretionary support. Capital rules have been modified to capture better the risks associated with structured finance positions and the provision of explicit liquidity commitments. And liquidity requirements have been designed to take account of potential demands on a bank from explicit liquidity commitments made by the bank to intermediate vehicles.

In the wake of the crisis and these regulatory actions, SIVs and many other similar off-balance sheet structures that relied heavily on implicit support have disappeared. But implicit support remains a significant issue in parts of the shadow banking system. For example, the impact of expectations of discretionary support from sponsors of money market mutual funds remains a concern today. Implicit support, which before the crisis was widely viewed as providing an additional layer of low-cost protection to investors, was in *Continued on page 70*

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fact broadly destabilizing when the condition of the financial firms making the implicit commitments was called into question. Financial regulators will need to be alert to the possible reappearance of this same dynamic in different kinds of investment vehicles or instruments in the future.

TIE: Should there be more restrictions on the ability of money market mutual funds to purchase risky assets such as commercial paper?

Tarullo: In 2010, the Securities and Exchange Commission amended its rules on money market mutual funds to require, among other things, stricter maturity and credit-quality rules for their portfolios. But, as former Chairman Mary Schapiro said, that amendment was only a first step in reform. It did not address the structural vulnerability of money market funds to runs, which was graphically illustrated in September 2008 when the Reserve Primary Fund "broke the buck" following the bankruptcy of Lehman Brothers because it held a considerable amount of Lehman commercial paper. As you know, that event set in motion a wave of redemptions as investors worried that the commercial paper of other financial firms held in other funds might also be at risk. Total redemptions of shares surpassed \$300 billion in just five days, and were halted only when the Treasury and Federal Reserve took unprecedented action to support the industry.

The Financial Stability Oversight Council has identified the potential for money market fund runs as a continuing risk to financial stability and, late last year, proposed for comment a draft recommendation to the SEC that the Commission take steps to address the remaining structural vulnerabilities. Hopefully this process will pave the way for effective reforms.

TIE: Since foreign central banks can borrow from the Fed through swaps and provide cheap U.S. dollar liquidity to their banks outside the United States, shouldn't we be concerned with unsustainable asset values on a global basis?

Foreign central banks are not providing "cheap" U.S. dollar liquidity to private banks outside the United States via

the central bank swap lines.

After all, the latest BIS quarterly report shows a huge global monetary expansion underway at a time of still relatively weak global GDP growth.

Tarullo: Let me begin by quibbling a bit with the premise of your question. Foreign central banks are not providing "cheap" U.S. dollar liquidity to private banks outside the United States via the central bank swap lines. The dollar lending by foreign central banks is priced at a spread over the OIS rate that corresponds to the term of the borrowing. That spread, which is currently 50 basis points, makes dollar liquidity from the foreign central banks unattractive to banks when they can get funding in the market at rates closer to the OIS rate, but more attractive in times of market stress, when dollar funding is not available so readily in the market. The low level of dollar swaps currently outstanding relative to periods of high stress suggests that most banks are not finding the rates at which they can borrow dollars from foreign central banks to be so cheap right now.

In part because of this pricing feature, borrowing under the swap lines is unlikely to be associated with unsustainable growth in foreign asset values, for several reasons. First, the foreign central banks are not lending dollars to their banks on an ongoing basis to fund asset growth. Instead, the lending occurs on a temporary basis only when other, marketbased sources of dollar funding have been disrupted. In fact, a key purpose of this lending is to prevent fire sales of existing dollar assets, which could destabilize markets in the United States, rather than to fund new asset purchases. Second, periods of growth in asset values tend to be associated with readily available, rather than scarce, funding; as a result, swap line use is not likely to be heavy when asset values are rising on a widespread and unsustainable basis. And third, banks tend to use dollar liabilities to fund dollar assets, not foreign-currency assets.

All this is not to say that the Federal Reserve does not pay close attention to global asset values. Swings in foreign asset values, and, more broadly, financial crises in foreign countries, can have significant effects on U.S. macroeconomic and financial developments and so are carefully monitored by the Federal Reserve.

Finally, on the subject of global monetary policy, it is important to recognize that monetary policy in the United States and in many other economies has remained very accommodative precisely because global GDP growth is still so weak. Of course, as the global recovery strengthens and gains traction, central banks will need to withdraw accommodation in a timely way. But we're not at that point yet.

TIE: Is the complexity of financial regulation that is necessary today in a world of universal safety net access systemically workable? And is the holding company structure

relevant today in an environment where the safety net has been extended to practically all types of financial services?

Tarullo: The issue of regulatory complexity is one faced in many areas, not just in financial regulation. There is often a trade-off between, on the one hand, the detail with which a regulatory scheme addresses an activity that is itself quite complicated and, on the other, the costs associated with such a complicated approach. These costs include the obvious out-ofpocket expenses for both firms and regulators entailed in an intricate regulatory system. But often other, less obvious costs are even more important. For example, because a complex regime will often be quite opaque, it may be difficult for the public to monitor whether government agencies are doing a good job overseeing it. Indeed, the government agencies may themselves have a difficult time monitoring the regulated firms, especially where the regulators are dependent on the firms for important technical information. Of course, simple regulations can have different kinds of costs, notably a bluntness that may limit relatively benign activities or provide many opportunities for arbitrage to evade the regulatory objective.

I mention all this just to point out that the problems of complexity arise not just because of concerns with moral hazard and the potential for systemic risk to impose great damage on our whole financial system. These concerns are, however, a very good reason to focus on strategies for dealing with the complexity issue in financial regulation. There's a certain irony in the fact that there's no simple answer to the problem of regulating complex economic activity. Indeed, I would caution against thinking that a simple, almost reductionist approach can provide an easy answer to this problem in the financial area. But in general we should be self-consciously moving towards a greater emphasis on relatively simple rules. I think a good starting point for considering how to navigate the strengths and shortcomings of various measures and approaches is to think in terms of complementary measures.

For example, in the area of capital regulation, there's good reason to have some relatively simple rules, such as leverage ratio and standardized risk-weighted capital ratio requirements. These kinds of rules provide reasonably transparent floors that can be used to protect both individual institutions and, by extension, the system as a whole. While the bluntness of such ratios could result in too much productive lending being discouraged if they were set too high, the use of several such measures could at least partially complement each other and thus compensate for the shortcomings of each ratio without having to raise any ratio to such an elevated level. Moreover, of course, in the financial regulatory area, we have the advantage of being able to complement regulations with supervisory measures such as the Federal Reserve's stress tests. The Basel Committee on Banking Supervision has begun work on ways to simplify what has become an Whether a particular foreign banking organization is or is not stateowned generally is not a factor used to tailor prudential standards in the proposed rules.

incredibly dense network of regulatory capital rules, and I have certainly encouraged that work.

On the issue of the bank holding company model, my view is that-if anything-the model has become more relevant, but with a change in orientation. One major shortcoming of the pre-crisis regulatory system was that it basically emphasized protecting the commercial bank from risks that might arise in other parts of the holding company, but the system neither emphasized the need to contain risks to the financial system associated with those other parts of the firms nor empowered the Federal Reserve to counteract such risks. Dodd-Frank corrected this shortcoming, and we have fundamentally revamped the regulatory and supervisory approach to large bank holding companies. The structure remains important for ensuring that the advantages of discount window access are available only to commercial banking operations, a goal strengthened by the changes that Dodd-Frank made to the rules on affiliate transactions.

TIE: Looking back, in the aftermath of the Great Financial Crisis, should many of the large U.S. financial firms—the so-called too-big-to-fail giants—have been broken up?

Tarullo: There has been considerable progress in building a framework for financial stability regulation in the years since the financial crisis. Some measures are in place. Others, while contemplated in Dodd-Frank or in various international agreements, are still in the process of being implemented. The one area where, in my judgment at least, we still need to develop an agenda pertains to the liability side of the balance sheets of financial firms—particularly, though not exclusively, those of the largest firms. The dependence of firms on short-term, non-deposit sources for a large proportion of their funding needs makes them—and thus the financial system as a

whole—vulnerable to severe disruption in the event of unexpected shocks to the values of important asset classes. In these circumstances, collateral values and the solvency of firms that own these assets can become quickly subject to great doubt, leading investors to refuse to roll over their short-term lending. This was surely the case with many mortgage-backed securities in the recent crisis, but could be equally true of other assets in the future.

There are various ways one could offset this fragile funding structure. One way, which has garnered some interest, would be to place a cap on a banking firm's short-term nondeposit liabilities as a fraction of U.S. gross domestic product, perhaps weighting these liabilities based on experience with relative run-off rates. Obviously, if such a consequential step were to be taken, it would appropriately be done through congressional debate and action. But there are also ways short of legislation to address this structural vulnerability, such as through a different set of quantitative liquidity requirements to complement the short-term liquidity coverage ratio recently agreed internationally or broadly applicable requirements for minimum haircuts to be applied in short-term wholesale funding that is backed by collateral.

In considering these or other steps, it will also be important to evaluate whether they would lead to greater migration of financial activity outside the ambit of prudentially regulated firms. This development could leave the financial system susceptible to severe disruption, both directly through the growth of this potentially unstable sector and indirectly by making the regulated firms less competitive, since very small differences in funding costs can make a big difference in relative profitability. The prospect of this kind of arbitrage is a principal reason why many thoughtful observers have proposed that at least some regulatory requirements on shortterm funding be applicable whether or not the counterparties involved are bank holding companies or otherwise subject to prudential oversight.

TIE: To what extent since the crisis has the U.S. financial system moved from an era of reckless risk-taking to a new era of risk aversion, unless tied to some form of government subsidy or safety net? To what extent is entrepreneurial risk-taking, particularly in America, being defunded? Will historians define the current situation as moral hazard run amok?

The proposal would treat certain activities

more strictly than in the past.

Tarullo: A critical factor inhibiting risk-taking, whether by entrepreneurs starting new businesses or large firms making new investments, has been the slow, often halting nature of the recovery from the financial crisis and ensuing deep recession. Until business people gain more confidence that increased demand for their goods and services will be realized, their willingness to take new risks will be understandably affected. And until conditions change, it will be difficult to know whether current credit standards have overcorrected from the laxness of the pre-crisis period. Looking at entrepreneurial developments more broadly, it is encouraging that venture capital funding has retraced about half of the decline suffered in the crisis. Hopefully this and other sources of equity capital for younger growing businesses will continue to increase.

Notwithstanding the importance of the aggregate demand story, however, one important channel for funding new and young businesses has pretty clearly been blocked. Prior to the financial crisis, many entrepreneurs relied on equity in their homes as collateral for bank loans to fund their ventures. Obviously, after the dramatic decline in housing prices, many no longer have this option available. Since startup firms are an important source of dynamism for the economy, it will be important to see if the substitutes for conventional loans that have arisen lately can develop into a reasonably dependable source of capital for entrepreneurs.

TIE: Finally, on the issue of monetary policy, it would seem that the challenge, as a result of current policies, is to determine the nature of asset prices—that is, to know when a rise in asset prices reflects real value versus when a dangerous asset bubble has appeared. Isn't the problem today that central banks have historically had a poor track record in judging asset valuations? Why will the current leadership at the Fed be any different in achieving success in asset price targeting? Why shouldn't financial markets be worried? In the long run, shouldn't we be worried that the future will be defined as a series of bursting asset bubbles of various sizes with destructive financial market volatility? How can you be sure the size of the monetary expansion is appropriate for the unfolding economic fundamentals?

Tarullo: In accordance with the mandate established by Congress, the Federal Reserve's monetary policy is aimed at promoting maximum employment and stable prices commensurate with the economy's long run potential. Because, as has become obvious, both of those goals can be seriously compromised by financial instability, monetary policymakers need to take account of unsustainable growth in credit that could be subject to quick and painful reversal, even when inflation does not appear to be a threat. This doesn't mean targeting asset prices which, as you suggest, is a very difficult undertaking. But I think it does mean monitoring trends such as rapid asset price growth in one or more sectors that are substantially dependent on rising leverage, or the increasing use of short-term debt in connection with complex new financial innovations.

While I have a lot of confidence that the current Federal Open Market Committee is focused on these issues, there isn't a foolproof way to ensure that as the crisis recedes further into memory, future Committees will be similarly vigilant. But I do think that organizational changes made since the crisis make it more likely that future Committees will at least be confronted with information suggesting a problem may be brewing. Chairman Bernanke has created an Office of Financial Stability, whose principal role is to provide ongoing analysis of financial market conditions and to provide regular briefings to both the FOMC and the Board of Governors. The Financial Stability Oversight Council and the Office of Financial Research in Treasury are also institutionalized mechanisms that increase the number and, hopefully, diversity of voices presenting regulators and monetary policymakers with relevant information and analysis.

Of course, there may be reasonable differences of views among policymakers as to whether credit conditions are sustainable. Even if there is rough consensus on a potential risk, there may be differences of views as to whether measures to *Venture capital funding has retraced about half of the decline suffered in the crisis.*

counter that risk might do more harm than good. There has, as you know, long been a debate as to whether monetary policy measures are too blunt to be useful in containing excessive credit growth in important, but still discrete, sectors of the economy. I'm probably more open to using monetary policy than perhaps the median central banker has traditionally been. In large part this is because I think that reliance on supervisory guidance to tamp down some forms of credit creation by regulated firms—while useful in some cases—will miss unregulated areas of the financial system and, indeed, carries the risk of just driving more activity to firms not subject to prudential oversight. But I acknowledge the difficulties of using monetary policy as well. We need continued academic and policy debate to sharpen and, if necessary, augment the macroprudential tools that are available in appropriate cases.