## William C Dudley: Basel and the wider financial stability agenda

Remarks by Mr William C Dudley, President and Chief Executive Officer of the Federal Reserve Bank of New York, at the 2010 Institute of International Finance (IIF) Annual Membership Meeting, Washington DC, 10 October 2010.

\* \* \*

Over the past year, important new regulatory initiatives have been advanced both at the national and international level. These include the recent agreement in Basel on stronger capital and liquidity standards for internationally active banks and the considerable regulatory changes embodied in the Dodd-Frank Act (DFA).

Today I want to discuss some of these initiatives, with a special focus on the recent agreement in Basel on capital and liquidity for large, internationally active banks. I will give my perspective on how these efforts have been informed by the lessons of the financial crisis and discuss what some of the likely consequences may be as these measures are put in place. Given the breadth of the changes, my remarks will be by no means complete. As always, my remarks reflect my own views and not necessarily those of the Federal Reserve System.

The biggest lesson of the financial crisis is that severe financial disruptions can inflict very large and persistent costs on real economic activity and employment. Thus, lawmakers and regulators must make widespread changes to create a more resilient and robust global financial system. But, at the same time, this must be done in way that ensures the financial system retains sufficient dynamism so that it can allocate capital efficiently to support innovation and economic growth.

The crisis revealed a number of significant weaknesses in the global financial system. First, many leading financial institutions at the core of the system did not have enough high-quality capital to be able to retain access to private funding markets in the face of the large credit and mark-to-market losses. In particular, they often held grossly inadequate capital against their trading book exposures and the counterparty credit risk generated by activities such as their over-the-counter (OTC) derivatives business.

Second, individual firms and the system as a whole had inadequate liquidity buffers to withstand marketwide disruptions. Indeed, there was widespread overreliance on short-term funding to finance long-term illiquid assets. This was especially evident among the major securities dealers, which depended on tri-party repo funding to finance much of their securities inventories, and in the so-called shadow banking system, in which entities such as structured investment vehicles and conduits were dependent on short-term funding to finance their long-term assets. Banks that had provided liquidity guarantees to these shadow banks were in turn exposed to runs on those entities.

Third, a lack of transparency exacerbated uncertainty about the creditworthiness of many institutions. Some of this was due to the complexity of the assets – collateralized debt obligations (CDOs), in particular, were very hard to value even in normal times. But, some of this was also due to the lack of transparency about certain markets – the OTC derivatives market for credit default swaps is one notable example.

Fourth, an inappropriate structure of incentives encouraged excessive risk-taking. This was evident within firms in the form of "the trader's option", in which compensation was based mainly on fiscal year results with no clawback when mark-to-market profits on illiquid securities and other assets turned into losses. It was also evident in the ability of the largest firms to benefit in terms of their funding costs via a perception that they would be "too big to fail".

Fifth, regulators and market participants did not appreciate how the financial system was interconnected so that shocks were transmitted broadly through the financial system, often intensifying rather than dampening as they spread.

The severe economic costs generated by the crisis indicate that the primary goal must be to reduce the likelihood and the severity of future financial crises. To accomplish this, we need a financial system that is better suited to withstand shocks of all kinds, regardless of their source. We need a financial system in which market participants face the appropriate set of economic incentives so that they do not take excessive risks, but instead behave in ways that generate outcomes that are supportive to economic growth and ongoing financial stability. This requires financial institutions to internalize the costs of their risk-taking activities up front and to hold capital and liquidity buffers sufficient to handle a plausible range of adverse outcomes. Finally, on occasions when these buffers prove inadequate and a financial firm does reach the brink of failure, the official sector needs the capacity to smoothly wind down such firms so that future taxpayer-funded rescues prove unnecessary.

Regulatory and supervisory efforts to accomplish these goals are proceeding down several distinct but related paths:

- Increase the capital and liquidity standards for all internationally active banks, measured by both quantity and quality of capital and liquidity, so that they are better able to absorb financial shocks without disrupting the flow of credit to the real economy.
- Introduce a credible resolution mechanism for managing the failure of a large systemic bank or nonbank financial institution, to reduce the economywide costs of such failures and, by making them less disruptive, further reduce moral hazard by diminishing expectations of future public support.
- Ensure that the largest and most interconnected financial institutions whether or not they are chartered as banks – face even more stringent prudential standards, in order to reduce moral hazard for the largest firms and lower the probability of their failure to below that of smaller and less systemically important institutions.
- Strengthen financial market infrastructures so that when failures inevitability occur, the shocks generated by these failures are dampened, not amplified as they propagate through the financial system.
- Broaden the oversight of the financial system in order to identify sources of systemic risk that may emanate from nonbank financial firms or from other areas of activity.

Turning first to the Basel III capital and liquidity standards agreed upon by the Governors and Heads of Supervision Committee (GHOS) in Basel last month, I believe these standards address some of the major shortcomings revealed by the crisis. In particular, the new standards will require banking organizations to significantly increase the amount of high-quality, loss-absorbing capital that they hold; significantly improve risk capture in trading, counterparty credit, securitization and other activities that the prior regulatory capital requirements did not adequately capture; make it more expensive for banks to provide liquidity guarantees to shadow banks; constrain the leverage that banking companies can take by introducing a credible, non-risk-based backstop; and increase the capacity of banks to absorb shocks that might temporarily impede their ability to access short-term funding markets. While these changes apply directly only to large internationally active banks, they will have wider ramifications for the financial system as a whole, including nonbanks and the capital markets.

Furthermore, I believe that the agreement achieves an appropriate balance between significantly increasing the minimum capital and liquidity requirements for the major banks, while doing so in a way that recognizes the current state of the global economy and that seeks to minimize adjustment costs. The international regulatory community consciously has

2 BIS Review 131/2010

been willing to trade off a relatively slow phase-in period for the new standards in order to reach a much higher level of standards.

The new capital rules are intended to provide strong incentives for banks to change their business models in ways that make the system more stable and reduce the negative impact their actions have on others – for instance, by providing incentives to standardize OTC derivatives contracts and clear such standardized trades through central counterparties. To understand what these new requirements mean for the amount of capital banks will ultimately have to hold, it is important to note that one of the *intended* consequences of these changes is for banks to adjust their business models in ways that reduce the risks their activities generate. This adjustment will likely reduce the amount of extra capital that banks would need relative to a world in which they kept their business models unchanged even as the new rules were phased in. In other words, the impact on banks must be evaluated dynamically, not by taking a snapshot of the banks' activities and balance sheets today.

That said, the new capital standards are much tougher than the existing regime. The requirements have been strengthened in several different dimensions. First, the standards emphasize common equity by creating an explicit quantitative capital standard for this highest form of capital, as compared with an implicit qualitative standard under the previous rules. This is important because the crisis demonstrated that bank investors and debt holders have a strong presumption that only common equity is truly loss absorbing outside bankruptcy. In the crisis, as losses climbed, Tier 1 capital ratios were eroded from the bottom, with tangible common equity ratios sometimes shrinking to levels that raised questions about a bank's viability and its ability to access the equity and debt markets. Although common equity is typically a higher-cost form of capital for banks, it absorbs losses on a going-concern basis and so preserves an institution's viability in the eyes of the market much better than other forms of Tier I capital, such as perpetual preferred stock or trust preferred securities (TRUPS).

Second, the standards create a new definition of what constitutes common equity. The emphasis is on the ability of common equity to be loss absorbing. For that reason, there are limits on the amount of the assets that are not readily saleable or loss absorbing that can be counted toward a bank's tangible common equity. These include assets such as mortgage servicing rights and deferred tax assets. Also, there is strict treatment of equity tied up in the form of minority interests. That is because this invested equity is not immediately available to the parent company to absorb losses in that company's operations.

Third, the minimum required ratio of total tangible common equity to risk-weighted assets will be increased significantly. Once the new standards are fully phased in, it will have to equal 4.5 percent of risk-weighted assets.

Fourth, the measure of risk-weighted assets – the denominator of the capital adequacy ratio – is constructed to better capture the risks that banks are taking in their activities. For example, the risks weights on trading account assets and for counterparty exposures have been increased substantially to reflect the lessons of the crisis. Note that due to better capture of the underlying risks, at least initially, aggregate risk-weighted assets in the system are likely to increase. This is not because the inherent riskiness of bank balance sheets has increased, but rather because that riskiness will be better captured.

In addition to the 4.5 percent minimum common equity standard, there is also a new capital conservation buffer requirement equal to 2.5 percent of risk-weighted assets. If a bank were to incur losses and fall deeper and deeper into this buffer, increasingly tough limitations would come into play in terms of the bank's ability to make capital distributions by paying dividends or buying back shares. This capital conservation buffer is designed to forestall the type of behavior that we saw during the crisis – banks continuing to dissipate capital by paying out dividends in order to demonstrate that they were strong. Instead, banks will have an incentive to raise additional equity to exit the buffer and its restrictions on distributions.

In order to maintain operational flexibility in terms of their business operations and an ongoing ability to distribute capital to their shareholders, we expect that banks will want to maintain their level of tangible common equity at or above 7 percent, the sum of the minimum requirement and the conservation buffer. However, we do anticipate that the buffer may be penetrated from time to time during adverse economic environments.

Finally, the risk-based ratios will be back-stopped by a new leverage ratio standard, which will constrain the amount of overall leverage that a banking organization can take relative to the sum of its non-risk-weighted assets and off-balance-sheet exposures.

Together, these changes represent a very significant upgrade of the standards: A much higher proportion of this ratio is now met by common equity; that common equity is much better quality than before; the amount of risk-weighted assets against which capital must be held has increased and better reflects underlying risk; a new capital conservation buffer is added, and there is a new backstop against excessive leverage.

So what were the considerations that went into constructing this new standard? The basic goal was to enable the big, internationally active banks covered by the Basel Accord to absorb the type of losses associated with a major marketwide financial shock and still retain sufficient market confidence so that they could continue to be able to fund themselves and, if necessary, to raise additional equity without the need for unusual government support.

I believe that the requirements were the outgrowth of at least four major considerations:

- 1. What type of losses could banks expect to occur in a crisis? In other words, how thick a buffer was needed to absorb shocks? This is represented by the 2.5 percent capital conservation buffer. Although this is not thick enough to protect every bank in every crisis, it does create a loss-absorbing cushion so that banks will retain their ability to access the capital markets even after incurring significant losses.
- 2. How much common equity must a bank hold to be viewed as viable by financial market participants? This is important because beyond a certain point banks lose their access to the capital markets, and this makes failure much more likely. The 4.5 percent minimum common equity requirement is set at a high enough level so that a bank operating above this level would very likely still be able to access the capital markets to replenish its capital base after large losses.
- 3. What was achievable internationally? It is important to have international convergence in terms of standards. This is necessary to minimize competitive inequity and to avoid creating incentives for a race to the bottom. If standards differed markedly around the world, then the conversation would inevitably shift to "what will help my banks competitively" from "what levels of capital do we need to have a sound financial system".
- 4. What is the appropriate tradeoff between benefits and costs? There are diminishing returns in terms of the benefits of ever higher capital requirements. Setting the bar at too high a level would increase intermediation costs too much and drive activities offshore or into areas that are not as closely regulated. At some point, higher requirements would not make the financial system safer, just the regulated sector much smaller.

On this last point, some argue that the new standards are too severe. They argue that, in the short run, the higher standards could lead to a significant constraint in credit that could hurt the nascent economic expansion. And, they argue, in the long run, that the higher capital standards will inevitably drive up lending costs and that this will hurt economic performance. Although I believe the new standards do impose some real costs on the financial system in order to achieve real benefits, I believe that concerns over the costs are exaggerated.

Turning first to the issue of the transition to the new regime, we cannot precisely predict the size of the adjustment costs as they will depend importantly on the strategies bank managers employ to meet the new requirements, and how bank investors respond to these actions. Nonetheless, I believe the transition is likely to be quite manageable for three reasons.

4 BIS Review 131/2010

First, many of the large U.S. banks already have large amounts of tangible common equity. In part, this represents the regulatory response during the crisis. The Supervisory Capital Assessment Program (SCAP) in 2009 required the large banks to have a capital buffer consistent with achieving a Tier I common ratio of 4 percent under a stress environment considerably worse than what was anticipated (or did, in fact, occur). Banks that fell short of this were forced to raise additional capital. On top of this, Troubled Asset Relief Program (TARP) repayment terms provided strong incentives for banks to issue common equity to repay the TARP preferred stock. In addition, several banks converted preferred stock into common equity. Roughly speaking, the 19 banks subject to the SCAP generated more than \$100 billion of common equity via share issuance and \$80 billion via conversion of preferred stock into common equity in 2009.

Second, as noted above, the standards are being phased in slowly. For example, in 2013, the tangible common equity standard will be only 3.5 percent. In 2013, there will be no conservation buffer requirement and banks will still get credit for items that will ultimately be deducted from common equity, such as deferred tax assets. The Federal Reserve, as the consolidated supervisor of the largest and most complex banking companies, does not expect these banks to meet the fully phased in standards today. Instead, the Federal Reserve will require firms to develop an adequate capital plan to meet the Basel III requirements as they become effective and will track progress toward meeting those plans over time.

Third, banks have many ways they can adjust their business models to meet the new standards as they are phased in. Many of these changes can occur without any risk of disruption to the flow of credit to households and business. For instance, banks can sell non-strategic assets to investors and can modify their minority investments in non-consolidated interests.

Low-quality legacy assets, such as subprime mortgage loans and second mortgages, will mature and run off. Risk-weighted assets will tend to fall as the economy recovers. Moreover, as banks book profits, deferred tax assets will shrink, reducing the magnitude of these future deductions from common equity.

Finally, it is important to note the significant potential earnings power of large U.S. banks, which have historically tended to have higher rates of return on their average assets relative to many of their foreign counterparts. Banks that currently are short of the 2019 standard could retain these future earnings to build up their capital ratios. Equity analysts project that the 20 largest U.S. banks will earn more than \$80 billion in 2010, and consensus estimates expect that figure will increase to around \$110 billion in 2011. Of course, because these estimates are dependent on an economy that continues to recover, we need to be cautious about relying entirely on as-yet-unrealized earnings as the primary means to meet the higher capital standards.

So what about the long-run consequences? It would be prudent to assume that requiring banks to hold more capital and higher cost capital is likely to result in somewhat higher lending spreads. Bank managements will need to generate sufficient income to support the rate of return on equity at a sufficient high level so banks can continue to attract capital from investors.

Of critical importance is whether the increase in lending spreads is likely to be large or not. Those who argue that the new capital standards will necessitate a large increase in lending spreads generally start with a rigid set of assumptions. These include: 1) Return on bank equity is unchanged; 2) the increase in bank equity does not affect funding costs; and 3) there is no change in the banks' book of business or on banks' ability and willingness to adjust other expenses, such as compensation.

Such rigid assumptions are unrealistic. This is particularly important because each assumption is likely to be wrong in the direction that reduces the impact on lending margins. First, the necessary return on equity that banks will have to generate to be able to attract

capital will likely fall. Because banks with more capital should be safer and have less volatile earnings, investors should demand a lower return on equity than before.

Second, by increasing the soundness of banks, an increase in bank equity, everything else equal, should also reduce funding costs. Third, higher bank lending spreads almost certainly will push some activity into the capital markets, constraining the magnitude of the rise in total lending costs. Finally, banks may be forced via competitive pressures to lower their compensation levels. By cutting compensation costs, banks could have smaller lending margins and still earn sufficient profits to generate a level of returns necessary to attract capital. Given all the potential margins for adjustment, there are good reasons to expect that the increase in lending margins will actually turn out to be quite modest.

Although any increase will be a real cost, this appears to be a necessary and appropriate price to pay for a much more resilient financial system. The cost represented by higher lending spreads has to be weighed against the benefits of a more robust and resilient banking system. Recent years have surely taught us that easy access to credit that is underpriced because it is not backed by sufficient capital is not a sustainable route to prosperity. Indeed, to the extent that tougher standards reduce the misallocation of resources in the real economy that often accompanies periods of financial excess, ensure more consistent access to finance over time and encourage investment by holding out the prospect of greater economic stability, the new standards could be consistent with a more rapid sustainable growth rate over the long run.

Turning next to the new Basel liquidity requirement, the new standard will likely necessitate a significant adjustment in behavior for those banks that historically relied on short-term wholesale funding and those that had negligible buffers but instead had relied on the Federal Reserve and the Federal Home Loan Bank System to be their liquidity backstops. However, the transition costs are likely to be quite manageable because, as was the case for the capital standards, there are many margins available for adjustment.

Before I assess the transition costs of the liquidity coverage ratio (LCR) standard, a few words about what the LCR is intended to do and how it operates. The notion behind the LCR standard is that large, internationally active financial institutions should have a liquidity buffer that enables them to operate for 30 days in a stress environment without having to rely on government support, including central bank liquidity backstops. Banks would have to have sufficient liquid assets that they could sell to be able to meet outflows stemming from deposit withdrawals; bank debt that matures and is unable to be rolled over; and drawdowns from committed credit and liquidity facilities provided to financial firms and other entities. The size of the required liquidity buffer depends, in part, on the maturity of the bank's assets and liabilities, the stickiness of its deposit liabilities, the amount of irrevocable liquidity backstops and composition of its assets.

The adjustment costs associated with the LCR standard should be low because, like capital, there are different, relatively low-cost ways to adjust to the standards. For example, because the liquidity buffer only needs to last for 30 days, a bank that extends the maturity of its short-term wholesale borrowing or its deposit liabilities by a month or two will find that this goes a long way in helping to meet this standard. Banks could also cut the level of their backstop liquidity lines and other commitments to financial firms. The standard assumes that such lines of credit can be fully drawn upon and thus, count as potential draws against the buffer.

Because the common international liquidity standards are relatively untested, regulators are implementing LCR with an "observation period". What this means is that unanticipated and unintended consequences generated by the new liquidity standard will be closely scrutinized and, if necessary, adjustments will be made to the rules if undesirable effects become evident over time. For example, the tough requirements on backstop liquidity lines could potentially be modified if such rules generated unintended negative consequences for short-term corporate funding markets, such as the nonfinancial corporate commercial paper market.

6 BIS Review 131/2010

Moving on from the changes to capital and liquidity standards, I now want to discuss how firms, markets and the official sector deal with distress in the event that it does occur. Of paramount importance in making the financial system more robust is the need for a viable resolution mechanism for large, complex financial firms. The Dodd-Frank Act does this for the nonbank operations of systemically important U.S. financial firms by authorizing the Federal Deposit Insurance Corporation (FDIC), under certain conditions, to establish a "bridge" bank to liquidate the troubled firm's operations in an orderly manner. Any net outlays incurred by the FDIC in this process must be recovered by assessing levies on the financial industry.

This resolution process is beneficial because an orderly resolution prevents the type of catastrophic collapse that leads to widespread market disruption. And it does so in a way that taxpayer funds are not at risk. However, much work needs to be done so that market participants can understand how such resolutions would work in practice. In particular, there will be some uncertainty about the precise conditions that will trigger a resolution under Title II of DFA. Even after DFA, the alternative of a normal Bankruptcy Code filing remains. In fact, DFA requires an evaluation as to why a filing under the Bankruptcy Code is not appropriate. In addition, the Dodd-Frank resolution process is complex, requiring multiple steps.

Moreover, the resolution regime in Title II of Dodd Frank could be very difficult to implement for complex, globally active firms. These banks operate in diverse legal regimes worldwide and it is very doubtful that DFA will apply to these banks' operations outside the United States.

One approach to this problem would be to harmonize the diverse insolvency laws in the various jurisdictions in which globally active firms have significant operations. But achieving this objective will be hard and take many years at a minimum.

This is one reason to require additional loss-absorbing capacity for systemically important firms, most (if not all) of which tend to be complex global organizations. Such a surcharge would be a mechanism to reduce the probability of failure for such firms below that of smaller firms.

A surcharge for systemically important financial institutions has two motivations. First, it compensates for the distortion created by the fact that a large financial firm may still be resolved differently than smaller firms and that this could conceivably, by being an orderly resolution process, reduce the costs imposed upon creditors. To the extent creditors see this as a benefit, this might enable large banks to retain some funding advantage over smaller firms not likely to be resolved in the same fashion. Second, it recognizes the large costs imposed on the broader financial system by the failure of systemically important banks.

Such an approach is being pursued both internationally and in the United States. The recent Governors and Heads of Supervision meeting in Basel, for example, endorsed additional loss-absorbing capacity for systemically important firms. Similarly, the Dodd-Frank Act provides that the Federal Reserve shall establish prudential standards for systemically important financial companies, including capital and liquidity standards that are "more stringent" than for other institutions that do not present systemic risk.

Strengthening financial market infrastructures is another important initiative underway to make the financial system more resilient and robust. In this regard, there are two important strands of work underway. First, there is strong momentum both in the United States and abroad to require that standardized OTC derivative products be cleared through central counterparties (CCPs) and that the information associated with all OTC derivatives trades be reported to trade repositories, with this information then being available to regulators around the world.

Second, the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commission (IOSCO) are undertaking a review of international standards for financial market infrastructures. This review will lead to a comprehensive set of

recommendations as to what constitutes best practice with respect to the operations of financial market infrastructures. These recommendations will apply to a broad array of financial market infrastructures, including CCPs and trade repositories. The final report will be completed during the first half of 2011. The goal will be to have these standards endorsed by the Financial Stability Board and the G-20 leaders. With those endorsements, it should be possible to harden the recommendations into more substantial standards.

In all of the reforms that we are implementing it is important that we pay close attention to the shadow banking system. By shadow banks, I mean the largely unregulated financial entities that take credit risk and/or engage in maturity transformation without access to explicit governmental backstops such as the Federal Reserve's discount window and or deposit insurance. As we saw in the crisis, without such support, these institutions are vulnerable to runs. When this occurred, the shadow banking sector imploded in a way that imposed significant costs on the regulated sector.

The risk is that tighter capital and liquidity requirements for the large financial institutions could push much of the business of credit intermediation and maturity transformation from the regulated sector to the unregulated sector. However, this risk is mitigated by the fact that shadow banks heavily rely on credit support and liquidity lines from the regulated sector. The costs of such facilities will be affected by the new capital and liquidity standards for banks. Thus, the economics of the shadow-banking sector are likely to change in a way that makes such activities less attractive. In addition, by increasing transparency and requiring some risk retention by issuers, Dodd-Frank should make the securitization markets in which shadow banks operate less likely to support poorly underwritten credit. Taken together, these changes mean it is less likely that there will be widespread movement of credit and maturity transformation from the regulated sector to the unregulated sector. Nonetheless, as my colleague Governor Tarullo noted in a recent speech, more will need to be done to increase the stability of the unregulated sector, and developments in this area will need to be scrutinized carefully in the years ahead.

Before closing, let me reiterate the importance to achieve harmonized global standards. As noted earlier, this is important for competitive equity reasons. But more importantly, it is necessary to ensure that banks and other financial firms cannot move their activities to evade regulation. If that were to occur, we would just have a race to the bottom and a less transparent and even more complex financial system.

In this respect, it is important that we regulate the U.S. operations of foreign banks in a way that is consistent with how U.S. banks are treated. It is also important that we work for the same type of national treatment abroad, and when there are differences in regulatory regimes, that we find ways of reducing or eliminating the substantive differences over time.

Finally, it is important that we clarify the responsibilities of the home and host countries and work to better share information across the regulatory community. This can help ensure that regulatory decisions are made and applied in a consistent and fair manner. It is also my hope that by establishing a robust global regime, we can mitigate the incentives for national regulators and supervisors to impose local rules that make it hard for globally active institutions to manage their operations on a global basis, thereby undermining the global integration of markets that has supported economic globalization.

Over the next 12 to 18 months, regulators will be particularly busy in implementing these reform efforts. Broad legal statutes now have to be turned into specific rules and regulations governing business practices, conduct and operations. Doing this well – in particular, in a way that is sufficiently informed, deep and broad – will be very important. Basel III and the

8 BIS Review 131/2010

Governor Daniel K. Tarullo, Comments on "Regulating the Shadow Banking System". Brookings Panel on Economic Activity, September 17, 2010.

Dodd-Frank Act are important markers on this road, but it will always be a journey to a never-reached destination of perfection.

Thank you for your kind attention. I would be happy to take a few questions.