William C Dudley: Financial stability and economic growth

Remarks by Mr William C Dudley, President and Chief Executive Officer of the Federal Reserve Bank of New York, at the Bretton Woods Committee International Council Meeting 2011, Washington DC, 23 September 2011.

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It is a pleasure to have the opportunity to be here today. I want to emphasize in my remarks today three points. First, a stable financial system is a prerequisite for sustainable economic growth. Second, the financial system that operated in the years leading up to the crisis failed in this regard, generating terrible outcomes in terms of economic growth and unemployment, returns available to savers and access to credit for borrowers. Third, although we have made progress in reforming how we oversee and regulate the financial system, our work toward achieving a more stable and dynamic system able to deliver its essential services to both savers and borrowers is far from complete. We must keep pushing this agenda forward and not be deterred by those that defend the status quo. As always, the remarks that follow reflect my own views and not necessarily those of the Federal Reserve System.

Let me start with a few words about where we are now. It is clear that the build-up of debt during the years prior to the crisis, as well as the crisis itself, has contributed to an unusually anemic recovery. This has occurred despite the best efforts of policymakers to stimulate demand through aggressive monetary and fiscal easing. The extraordinarily poor economic outcomes we see today underscore the importance of building a financial system that is resilient in its ability to provide credit to households and business throughout the business cycle. It also underscores the importance of limiting the types of financial and real imbalances that develop during times of prosperity. When such balances unwind, they can cause significant damage to the financial system and the economy.

A range of reforms are in train as the Dodd-Frank Act and other initiatives are implemented in the United States and abroad. Within the Federal Reserve System, we are building a more robust framework for financial stability. And, through the Financial Stability Oversight Council (FSOC), interagency coordination in identifying and mitigating risks to financial stability is being strengthened.

As we move to implement financial reform, we should not be dissuaded by those who argue that the costs of reform are too high or that the job is simply too difficult. I grant that not everyone is, or will be, happy with all the reform measures. Reasonable people can disagree about the best way to achieve certain public policy objectives or the appropriate speed of the transition. But I think that the fundamental point that the financial system needs to be changed in profound ways should be broadly accepted at this point.

- Policymakers and market participants must acknowledge that the financial system is inherently unstable that it is prone to booms and busts, and that these episodes can destabilize the real economy. As a consequence, at times, we must be willing to intervene to restrain financial booms in order to temper the busts.
- Reform should be undertaken in ways that better align the economic incentives of participants in the financial system with the goal of financial stability.
- We should strive to achieve a degree of transparency in the financial system that would enable market participants to make informed judgments about their financial market risks and exposures.
- The core of the financial system the major banks, non-bank financial intermediaries, and financial market infrastructures must be made more resilient to adverse shocks and less susceptible to runs.

- Recovery and resolution regimes must be effective in limiting the contagion to the broader financial system when major financial intermediaries or financial market infrastructures come under stress.
- We must pay close attention to how all the components of the financial system interact. It can't just be about particular institutions and infrastructures. Market processes and practices are also very important.

Turning first to the issue of financial booms and busts, empirical observation makes it clear that financial markets are inherently unstable. Throughout history we have seen numerous sizable booms and damaging busts. The notion that financial markets are dynamically unstable is also supported by controlled experiments conducted by behavioral economists.

Now I accept the notion that some minimum degree of instability is unavoidable. That is the price society pays for maturity transformation and the other services provided by the financial sector – services that produce large public benefits. But I doubt that this should be the end of the story – we also have some control over the amplitude of booms and the severity of the busts.

Although it is impossible to attribute the instability of financial markets to any one single driving force, recent experience suggests that in many cases innovation plays an important role. I explore this point further in the printed version of my remarks – but for the purposes of our discussion today let me summarize it by saying that innovations that initially create real value generate feedback mechanisms that often fuel the development of excessive expectations – a boom that eventually reverses when the basic belief system that sustained it is contradicted by events.

Such innovations can occur in the real economy – consider the Internet – or in the financial sector – think of subprime lending and structured finance products. Although the role of innovation has differed across various booms and busts, some important common elements are evident in many of these episodes.

Early on in the cycle, an innovation can lead to changes in fundamental valuations or the creation of new markets and financial products. Examples of this might include the technology boom that followed the creation of the Internet or the subprime lending and the associated structured finance innovations that supported the housing boom.

As market participants respond to the innovation, this may cause a surge in business activity. Consider the investment in fiber optic cable and telecommunications equipment in the late 1990s or the surge in U.S. housing demand in the 2000s. This surge in activity drives up profits and prices, which in turn sustains the boom. As part of this process, feedback mechanisms work to reinforce beliefs in the importance and sustainability of the innovation. In the tech bubble, for example, some new firms do displace traditional providers and network effects support scale and profitability and deter new entrants. In the case of the subprime lending boom, the provision of credit led to increased demand, which pushed up prices, and rising prices, in turn, held down credit losses. These feedback mechanisms reinforce belief in the sustainability of the boom, often extending the boom far beyond activity levels or valuations justified by how the innovation has changed the "fundamentals."

The process often comes to an abrupt end, and generally does so when the basic belief system that underpinned the boom is contradicted by events. In the tech boom, prices fell when earnings didn't materialize because only a few firms could achieve and sustain first-mover advantages. In the subprime mortgage episode, loss experience climbed sharply once the options of selling or refinancing at higher prices was no longer available. With the benefit of hindsight, the inherent contradictions supporting the boom are exposed. For example, the U.S. housing boom was unsustainable because it was not possible to indefinitely keep relaxing credit underwriting standards to qualify new buyers to stoke demand. It was also unsustainable because the rise in prices often led to a supply response that limited the prospect of further price increases.

Another class of threats to financial stability emerge from sudden reversals of market sentiment regarding economic policy and institutional arrangements. This is a complex issue which I will not explore in detail today, other than to note that here too, early profits all too often feed pro-cyclical behavior, undermining market discipline. This in turn facilitates the accumulation of both private and public imbalances that are painfully difficult to unwind when financing suddenly stops.

When sudden reversals occur, large costs are imposed on the real economy and the financial system, costs that are not fully internalized by the market participants that may have benefited from the boom. The often significant negative externalities associated with financial market instability suggest that regulation and prudential standards should be aimed both at limiting the frequency and extent of booms and at building a more resilient financial system, so there is less damage when the busts inevitably occur. The goal here is not to use regulation to prevent or even limit innovation, whether real or financial.

Many innovations have generated significant benefits for the macro-economy. For example, the Internet, which lay at the heart of the tech bubble, generated myriad benefits. Similarly, innovations in the financial realm have enabled businesses to limit risk and specialize in their core competencies, and households to smooth consumption. This in turn has enabled the economy to be more productive.

Instead, a critical objective of prudential oversight and regulation should be to enhance the system so that financial transactions of all forms reflect an assessment of risk and return by both the borrower and the lender that is as accurate as possible, recognizing that we live in an inherently uncertain world. This means that our reform efforts should be aimed at strengthening the quality of information and the system of incentives governing risk-taking by both institutions and individuals. And on those occasions when regulators judge that a systematic understatement and mispricing of risk may be occurring, we need to find better and more effective ways to actively lean against those dynamics. This includes using the bully pulpit to point out why a particular boom is likely to prove unsustainable.

It also means ensuring that markets are structured so that investors with differing perspectives on the value of an asset are able to actively participate. Booms tend to go further when the ability to "go short" is limited or emerges only late in the game. Second, regulation needs to be oriented to establishing standards that will be appropriate throughout the cycle – for both the boom period and the bust. For example, in terms of subprime mortgage underwriting, this would have included enforcing standards with respect to loan valuation, loan-to-value ratios, household income verification, and the quality of loan documentation. As I have argued before, monetary policy will often, though not always, be too blunt a tool for such tasks. Generally, it will be better to develop and use more surgical instruments designed to fit the particular circumstances.

In addition, no matter how effectively we reform the financial system, it seems unlikely that we will ever be able to completely eliminate booms and busts. There will be problems in identifying the boom – distinguishing between what is sustainable and what is unsustainable. There also will be broader and even more subtle obstacles – booms, when they are underway, are typically enjoyable. As a result, regulatory interventions that temper booms normally are going to be unpopular. So in practice even activist regulators may struggle to act early enough and with sufficient force to arrest a boom before it becomes a bubble. This suggests that to make the financial system secure, we are going to have to do much more than just act to temper booms and busts.

In this regard, making financial markets and institutions, in their practices and structure, less prone to amplifying and propagating shocks is a critical step. This means, in particular, that regulation should be designed to create incentives that operate over sufficiently long time horizons so that the entire cycle of boom and bust is included.

For risk management systems, this includes using stress scenarios to place appropriate limits on concentration and risk exposures. The use of value at risk (VAR) models that

emphasize recent experience is clearly inadequate. In the case of compensation practices, firms and regulators need to continue to look for ways to tie compensation to the profitability of the firm over the cycle and rather than over shorter time frames, such as the calendar year, and making sure that compensation is appropriately adjusted for the risks that were taken. There also needs to be a framework for ensuring that collateral haircuts are high enough to provide meaningful protection in bad states of the world even if this means keeping collateral margins higher during the good times.

Making progress on this front would help limit the propensity for leverage to increase when loss experience is low and to provide greater protection when volatility climbs and market conditions become less buoyant. In general, we need to continue to look to implement changes in systems and practices that will help dampen the pro-cyclicality of the system, and temper the amplitude of both booms and busts.

Attention to the incentives created by infrastructure design is also important. Poor infrastructure design can serve to mask and obscure participants' understanding of the credit and liquidity risks that they are exposed to. A good example of this is the triparty repo market, which plays a central role in providing funding on a collateralized basis. This market for short-term credit evolved in the United States in a manner in which transactions between lenders and borrowers covered only part of each day - from late afternoon to early morning. During the middle of the day, the two large clearing banks supplied huge amounts of intraday credit to the major securities dealers. Borrowers' assumed this credit would always be available to them, and did not appreciate the rollover risk to which they could be exposed if a clearing bank decided not to lend to them during the day. Similarly, triparty lenders underestimated their exposure to borrowers, believing that the clearing banks would always return their funds each morning. When triparty borrowers encountered funding pressures, these assumptions were starkly called into question. The private sector Triparty Repo Infrastructure Task Force, created in 2009, has made progress toward the objective of creating a more stable triparty market, but deeper change is needed to achieve real systemic risk reduction in this market. I will return to this subject later.

As part of our financial stability effort, we also need to build in short-circuit mechanisms that help to dampen shocks and increase resilience. This is reflected in work underway in implementing the Basel III agreements relating to the capital conservation buffer and also on capital planning in our supervisory process. This includes requirements for financial intermediaries to cease paying dividends when economic circumstances deteriorate. It also includes developing a systematic framework so that banks can be required to raise capital to ensure that they have adequate resources to deal with adverse economic scenarios – even if those scenarios have a low probability of being realized.

These innovations are designed to limit behaviors that we saw during the financial crisis that made the financial system less robust. Banks were reluctant to cut their dividend payments and compensation because of fears that this would signal weakness. These payouts depleted capital and made these institutions more vulnerable to deteriorating economic circumstances.

Similarly, banks were reluctant to raise capital to protect themselves against particularly adverse states of the world. This was unfortunate because the collective behavior of banks to be less prepared for adverse states of the world, often made such adverse states of the world more likely. In an important sense, a poorly capitalized bank generates negative externalities, making the entire financial system less secure, with costs to other financial market participants, whereas the reverse is true of a well-capitalized bank.

As noted earlier, another important step is to increase transparency throughout the financial system. There are at least two important elements to this. First, regulators need to have comprehensive access to information about the financial institutions and markets that they oversee – including ones that may not be directly regulated. Without such information,

diagnosis of emerging problems is more difficult and less timely, and appropriate remedies are more difficult to develop.

Second, financial institutions and other market participants need access to high quality information in terms of the financial condition of their counterparties. Balance sheet information including capital and liquidity positions and counterparty exposures would enable financial market participants to more accurately assess the condition of those with which they do business. Increased transparency would reduce the level of uncertainty, which contributes to risk aversion and financial crises. Greater transparency in terms of off balance-sheet activities such as OTC derivatives exposures might also be helpful for the same reasons.

Greater transparency is often unpopular because it may reduce market power and reveal business strategies and, thereby, limit profits. But the private loss of profit opportunities must be balanced against the public good of greater financial stability.

Such steps reinforce the work underway to make the major financial intermediaries and financial market infrastructures more resistant to shocks when they inevitably occur. This includes appropriate capital and liquidity requirements and appropriate risk management practices for banks and financial market infrastructures.

Finally, when institutions do get into difficulty we need a credible way of enabling these institutions to recover or, if recovery is not possible, to be resolved in an orderly manner so that failure of any one institution doesn't threaten to bring down the rest of the financial system.

So how are we doing relative to the agenda that I have laid out? In my opinion, we have made a good start, but there is a long ways to go. In many areas, we have identified the necessary tasks only in general terms. Progress in figuring out the details and the implementation path and how to coordinate the efforts on a cross-border basis is more limited.

I would particularly highlight the cross-border coordination problem – regulatory oversight is national, but many financial firms and infrastructures operate on a global basis. Effective reform requires mutually consistent global standards – and while international cooperation to date has been good on many fronts, progress is uneven, and the devil is in the details of implementation. We need all national authorities to resist the temptation to favor domestic financial interests over the interest of achieving a true level playing field globally. And we should resist the urge to favor locally controlled infrastructures where global solutions would better advance the collective financial stability interest. Instead we should work to ensure fair access to global infrastructures. Also, it is important that national regulators have access to data and a role in the regulatory oversight of such global infrastructures when that is relevant to their own national financial stability agendas.

In the United States, I think we have made more progress in bolstering the resilience of our banking institutions than we have on the other tracks. There are two elements to this. The first element is the increase in capital that has already occurred. The major U.S. banking institutions are much better capitalized today than they were in the fall of 2008.

The increase in capital reflects a number of factors – a long period of low capital payouts relative to income, significant equity raises, as well as sizable asset dispositions that have shrunk the balance sheet and bolstered capital. The fact that credit losses have abated and this has enabled banks to release reserves has also been important.

The second element is the international agreement to implement new Basel III capital standards. Not only will Basel III significantly raise the Tier I capital standard when it is fully implemented in 2019, but also it raises the quality of capital by putting the emphasis on tangible common equity.

In addition, we and our partners in the international community are in the process of implementing capital surcharges for large, systemically important financial institutions (SIFIs),

with the size of the surcharge dependent on size, complexity, and interconnectiveness. I appreciate that it is impossible to calibrate "SIFIness" precisely, but this is not a valid argument for no surcharge.

The logic behind the SIFI surcharge is that the failure of a systemically important institution would generate a very large shock to the rest of the financial system. As a consequence, it makes sense to require higher capital for such firms to reduce their probability of failure.

In addition, the Federal Reserve's efforts to improve banks' capital planning processes and evaluate their capital dispositions in the context of stress scenarios – the so-called Comprehensive Capital Assessment and Review (CCAR) process – is an important innovation. Most significantly, this process induces banks to improve their capital planning processes in light of potential stress scenarios. It also creates an enforcement mechanism so that dividends and share repurchases can be suspended more quickly when economic circumstances deteriorate.

On the liquidity side, there has also been progress. U.S. banks have bolstered their liquidity buffers and the Basel Committee has proposed a liquidity coverage ratio requirement that effectively would require large, systemically important banks to hold sufficient liquid assets so that they could reasonably conduct their operations for 30 days without having to raise any new funds. In addition, the industry is reengineering how the triparty repo system operates in order to significantly reduce the large intraday exposures of the two clearing banks in the system. This is important because, as we saw during the financial crisis, very large intraday exposures can prove destabilizing.

However, I would argue that progress on the liquidity front has not progressed as far as desired.¹ First, many banks remain dependent on short-term funding to finance longer-term assets from counterparties that tend to flee at the first signs of distress. In particular, money market mutual funds remain vulnerable to runs. Such runs can occur even when the underlying risks remain negligible, making money market mutual funds a source of instability. Just a question from an investor about the fund manager's exposures can cause the fund manager to withdraw funding from a counterparty. This may be market discipline, but it does not operate in a way that makes the financial system more stable. The SEC is leading an effort to reform the money market mutual fund industry.

Second, the Basel liquidity coverage ratio is under review to ensure that it accomplishes its goals without creating adverse unintended consequences. It will be implemented but in a somewhat altered form, since the proposal is not locked down to the same degree as the Basel III capital standards.

Ensuring that financial market utilities (FMUs) are robust is another important workstream with a number of important elements. For example, the Dodd-Frank Act has provisions that enable the Financial Stability Oversight Council to designate particular FMUs as systemically important and, therefore subject to tougher prudential standards. Internationally, the Committee on Payments and Settlement Systems (CPSS), which I chair, and the International Organization of Security Commissions (IOSCO), have proposed a comprehensive set of operational standards for FMUs, which I expect will be finalized early next year. We expect that these principles will be endorsed and adopted by the G20 countries, establishing a minimum standard for important FMUs around the world.

However, progress is slow and uneven. For example, it is unlikely that the G20 countries will meet the goal to clear all standardized over-the-counter derivative trades through central

¹ In general, I think progress on liquidity is inherently more difficult than on capital because tougher liquidity standards conflict with one of the basic function of banks-maturity transformation. Savers want to hold their funds in highly liquid, short-term assets. But borrowers want to lock up their funding over long time periods. Banks help bridge that gap. Pushing banks hard on the liquidity side runs up against this constraint.

clearing counterparties by the end of 2012. Similarly, I have my doubts whether the next set of industry recommendations to reduce risk in the triparty repo market will be sufficient to eliminate all the major potential sources of instability – including inadequate risk management practices and lack of resiliency to a dealer default. Experience suggests that it is not easy for market participants to agree on measures that enhance financial stability when this goal conflicts with the commercial and business interests. If the private sector falls short in this instance, public authorities may need to intervene and impose more forceful regulatory solutions.

I also think that the scorecard is mixed with respect to making financial institutions, in their practices and structure, less prone to amplifying and propagating shocks. On one hand, the capital rules and the CCAR process should cause banks to husband their capital better during times of stress than was the case during the financial crisis. Also, compensation practices are improving in that more pay is deferred and over longer time periods. Similarly, risk management practices have improved. Institutions are better able to aggregate and assess their risk exposures within short time periods and stress testing means that there is a better understanding of how these exposures might perform in adverse environments.

But our task remains unfinished. While progress on reforming compensation practices is welcome, I recognize that there is still much to be done before we can truly say that incentives are lined up in a way that fully supports financial stability objectives.

We have work to do on the information front too. Consider the issue of international regulatory access to data. Currently U.S. bank regulators do not have access to the consolidated global balance-sheet information of the foreign banks that operate in the United States (or vice versa for that matter). Our examiners see data associated with the foreign firms' U.S. operations, but not how that fits in with their operations abroad. Without certain specific types of consolidated global information, it is difficult to place the U.S. operations of a foreign firm in their global context, and make informed judgments about the adequacy of such firms' capital and liquidity buffers. For example, liquidity is often managed on a global basis, and key business lines are frequently managed globally, even if they reside in multiple legal entities located in different jurisdictions. Making progress in establishing protocols that would enable bank regulators to share more relevant confidential supervisory information on a cross-border basis would be a significant advancement. Such enhanced collaboration offers attractive alternatives to ringfencing or other actions that seek to impose local solutions to risks facing globally active firms.

Similarly, information about counterparty exposures is not broadly available. Occasionally, information is revealed following specific stress tests, but disclosure is very incomplete and irregular. Nor is good pricing information on many financial market instruments such as OTC derivatives readily available. This may ultimately change as such OTC derivatives instruments become more standardized, are centrally cleared, and the data associated with such trades are reported to trade repositories – but, as noted earlier, this still lies off in the future. Similarly, implementing a global legal entity identifier standard that would enable regulators (and potentially others), to easily aggregate information on a consolidated legal entity basis is still a work in process.

Similarly, there has been little progress made with respect to reengineering the financial system so that the transmission mechanisms act to dampen rather than amplify shocks. However, I wouldn't be very critical here. This is particularly difficult work for several reasons. First, it is difficult because it relates to how all the parts of the financial system interact. It requires a holistic approach and an evaluation of how the financial system responds to shocks. Up to this point, regulatory reform efforts have been more focused on individual banks and infrastructures, rather than how the entire system functions. Second, it is difficult because the evaluation must extend to entities and activities that operate outside of the more tightly regulated core – including, of course, the so-called "shadow banking system." In the U.S., some of this responsibility undoubtedly falls to the Financial Stability Oversight Council,

which was created by the Dodd-Frank Act. But this is a relatively new institutional arrangement and how well it will be able to perform its mission in practice remains to be determined. Similarly, on an international basis, the Financial Stability Board has undertaken an initiative to evaluate risks within the shadow banking system, but this effort is also still in a fledging stage.

Finally, turning to the last issue about how to deal with institutions that run into difficulty, there has been progress. In the United States, the Dodd-Frank Act (DFA) gave the FDIC the authority to resolve certain large systemically important financial firms, on the recommendation of the Federal Reserve and the FDIC, and after the Treasury Secretary makes certain determinations in consultation with the President. Among other things, DFA enables the FDIC to establish a bridge institution in which critical activities could be moved so that the failure of a major institution will not unduly disrupt the provision of key financial services. DFA also authorizes the Federal Reserve to require that such institutions develop recovery and resolution plans – plans that must be acceptable to the Federal Reserve and the FDIC. The need to produce such plans will likely create some incentive for rationalizing complex corporate structures and, presumably, make resolution easier to implement.

But a major challenge remains in implementing resolution effectively on a cross-border basis. The legal rules and regulatory regimes differ across legal jurisdictions. So, when a multinational banking organization becomes insolvent, each subsidiary and affiliate must be resolved in multiple bankruptcy proceedings, with the prospect of inconsistent treatment and larger than necessary losses in aggregate. Although the Financial Stability Board has taken up this issue, the legal impediments to progress here are significant despite the best efforts and intentions of regulators. The difficulty in implementing an efficient cross-border resolution is one of the reasons why the largest globally active firms are being asked to hold additional capital.

In conclusion, let me emphasize the importance of the mission – to reform and better regulate the global financial system so it can perform its key financial intermediation function of funneling savings from investors to borrowers even under adverse circumstances. Clearly, the financial system we had in 2008 was woefully inadequate relative to this mission.

Both the official sector and the private sector have responsibilities with respect to the work that remains ahead. It falls on us as regulators to seek to minimize the costs and adjust as the unforeseen consequences of reform become apparent, and to be mindful of the adjustment costs and challenges facing many firms and markets. In particular, we need to understand as best we can how all the threads of the reform effort interact within one integrated global financial system. We also need to ensure that, where the law gives us latitude, that compliance and other costs are calibrated to be commensurate with the financial stability benefits generated by particular reform measures. In this respect, we must be particularly sensitive to the burden that the regulatory environment places on smaller, less systemically important institutions.

But the private sector has responsibilities too. Banking leaders and industry trade groups should propose smart solutions to achieve essential financial stability objectives and not simply lobby against change. The industry has an interest in a healthy financial system that can withstand shocks and adverse economic circumstances. More statesman-like engagement is both warranted and welcome.

Thank you very much for your attention. I am happy to take a few questions.