

## **Ben S Bernanke: Financial regulation and financial stability**

Speech by Mr Ben S Bernanke, Chairman of the Board of Governors of the US Federal Reserve System, at the Federal Deposit Insurance Corporation's Forum on Mortgage Lending for Low and Moderate Income Households, Arlington, Virginia, 8 July 2008.

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I would like to thank Chairman Bair for inviting me to address this conference on mortgage lending to low- and moderate-income households. The decision to own a home is one of the most important decisions that families make. Whether owning a home is the right choice for a particular individual (or family) depends on many factors specific to the individual. However, for those who are willing and financially prepared to undertake homeownership, we look to our financial system to provide access to mortgage credit in ways appropriately tailored to each borrower's needs.

Unfortunately, in the past few years, many mortgage loans were extended that were poorly underwritten or whose terms were inadequately disclosed, particularly in the subprime market. As you know, those poor lending practices have contributed to a sharp increase in mortgage delinquencies and foreclosures. The resulting costs have been felt not only by borrowers but also by entire communities, as foreclosure clusters have caused neighborhoods to deteriorate and reduced municipal tax bases. The decline in the national housing market, which has been a major cause of the broader slowdown in economic activity, was in turn greatly exacerbated by the collapse of subprime lending. And financial institutions have suffered large losses, with implications for the cost and availability of new credit.

The recent experience, including the broader turmoil we have seen in the financial markets, will have – indeed, is already having – important consequences for U.S. regulatory policy. First, regulators are taking action to strengthen consumer protections. Next week, the Federal Reserve Board will issue new rules on mortgage lending, using its authorities under the Home Ownership and Equity Protection Act. These new rules, which will apply to all lenders and not just banks, will address some of the problems that have surfaced in recent years in mortgage lending, especially high-cost mortgage lending. We received many helpful comments on our proposal and we incorporated a number of them into the final rules. In another effort to protect consumers, the Board has also recently issued proposals to substantially improve credit card disclosures and to address a number of unfair or deceptive acts and practices in credit card lending.

Second, regulatory policy can help to ensure that mortgage credit is available to qualified borrowers, including those of low and moderate incomes. In particular, I welcome recent efforts to improve the regulatory oversight of the government-sponsored enterprises, Fannie Mae and Freddie Mac. If these firms are strong, well-regulated, well-capitalized, and focused on their mission, they will be better able to serve their function of increasing access to mortgage credit, without posing undue risks to the financial system or the taxpayer. Policymakers are also discussing the modernization of the Federal Housing Administration and the expansion of the products and programs it might offer to make mortgage credit available and to help prevent avoidable foreclosures.

Third, instability in our financial system over the past year or so has importantly affected the availability and terms of credit and the pace of economic growth. Thus, beyond actions focused on mortgage markets, regulators must consider what can be done to make the U.S. financial system itself more stable, without compromising the dynamism and innovation that has been its hallmark. Several bodies, including the President's Working Group (PWG) in the United States and the international Financial Stability Forum, have recently issued comprehensive reports on the lessons of the financial turmoil with recommendations for

regulators and the private sector. Many of these recommendations are being implemented, including more stringent regulation of mortgage lending (recommended by the PWG), strengthening of regulatory capital and liquidity management requirements for banks, reforms of the credit rating agencies, and others. The Federal Reserve has been actively involved in developing and implementing these necessary reforms. In the remainder of my remarks, I would like to discuss this more general issue of promoting financial stability, including some of the lessons learned, what the Federal Reserve is already doing, and how we as a society might wish to go about strengthening our financial system for the future.

### **The Bear Stearns episode and its implications**

As you are aware, one of the key events in financial markets in recent months was the near-bankruptcy in March of the investment bank Bear Stearns. The collapse of Bear Stearns was triggered by a run of its creditors and customers, analogous to the run of depositors on a commercial bank. This run was surprising, however, in that Bear Stearns's borrowings were largely secured – that is, its lenders held collateral to ensure repayment even if the company itself failed. However, the illiquidity of markets in mid-March was so severe that creditors lost confidence that they could recoup their loans by selling the collateral. Hence, they refused to renew their loans and demanded repayment.

Bear Stearns's contingency planning had not envisioned a sudden loss of access to secured funding, so it did not have adequate liquidity to meet those demands for repayment. If a sale of the firm could not have been arranged, it would have filed for bankruptcy. Our analyses persuaded us and our colleagues at the Securities and Exchange Commission (SEC) and the Treasury that allowing Bear Stearns to fail so abruptly at a time when the financial markets were already under considerable stress would likely have had extremely adverse implications for the financial system and for the broader economy. In particular, Bear Stearns' failure under those circumstances would have seriously disrupted certain key secured funding markets and derivatives markets and possibly would have led to runs on other financial firms. To protect the financial system and the economy, the Federal Reserve facilitated the acquisition of Bear Stearns by the commercial bank JPMorgan Chase.

We supplemented our actions regarding Bear Stearns by establishing the Primary Dealer Credit Facility (PDCF). Under the PDCF, the Fed stands ready to make fully collateralized loans to the remaining four major investment banks plus other broker-dealers, called primary dealers, that transact regularly with the Federal Reserve.<sup>1</sup> The Fed also created the Term Securities Lending Facility (TSLF), which allows primary dealers to borrow Treasury securities using other types of assets as collateral. These new facilities assured the secured creditors of primary dealers that those firms had sufficient access to liquidity, reducing the danger of runs like the one experienced by Bear Stearns. Although short-term funding markets remain strained, they have improved somewhat since March, reflecting the availability of several Fed lending facilities as well as the ongoing efforts of financial firms to repair their balance sheets and increase their liquidity.

The PDCF and the TSLF were created under the Federal Reserve's emergency lending powers, with the term of the PDCF set for a period of at least six months, through mid-September. The Federal Reserve is strongly committed to supporting the stability and improved functioning of the financial system. We are currently monitoring developments in financial markets closely and considering several options, including extending the duration of our facilities for primary dealers beyond year-end, should the current unusual and exigent circumstances continue to prevail in dealer funding markets. At the same time, we are taking

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<sup>1</sup> Primary dealers are banks and securities broker-dealers that trade in U.S. government securities with the Federal Reserve Bank of New York. On behalf of the Federal Reserve System, the New York Fed's Open Market Desk engages in the trades to implement monetary policy.

measures that will serve over time to strengthen the primary dealers, other financial institutions, and the overall financial system. As I will discuss, these measures include working with the SEC and the primary dealers to increase the firms' capital and liquidity buffers and cooperating with other regulators and the private sector to help make the financial infrastructure more resilient.

### **Prudential regulation and supervision**

In general, our system relies on market discipline to constrain leverage and risk-taking by financial firms, supplemented by prudential oversight when government guarantees (such as deposit insurance) or risks to general financial stability are involved. However, the enormous losses and writedowns taken at financial institutions around the world since August, as well as the run on Bear Stearns, show that, in this episode, neither market discipline nor regulatory oversight succeeded in limiting leverage and risk-taking sufficiently to preserve financial stability. Working collaboratively with regulators both here and abroad as well as with the firms themselves, the Federal Reserve has redoubled its efforts to strengthen the capital positions, liquidity reserves, and risk-management practices of the institutions for which we have supervisory responsibility, including bank holding companies and state-chartered banks that are members of the Federal Reserve System. Shareholders, managers, and investors are likewise taking steps to protect their interests in a period of continued market strains.

From a regulatory and supervisory perspective, the investment banks and the other primary dealers raise some distinct issues. First, as I noted, neither the firms nor the regulators anticipated the possibility that investment banks would lose access to secured financing, as Bear Stearns did. Second, in the absence of countervailing regulatory measures, the Fed's decision to lend to primary dealers – although it was necessary to avoid serious financial disruptions – could tend to make market discipline less effective in the future. Going forward, the regulation and supervision of these institutions must take account of these realities. At the same time, reforms in the oversight of these firms must recognize the distinctive features of investment banking and take care neither to unduly inhibit efficiency and innovation nor to induce a migration of risk-taking activities to institutions that are less regulated or beyond our borders.

Since March, the Federal Reserve has been working closely with the SEC, which is the functional supervisor of each of the primary dealers and the consolidated supervisor of the four large firms that are not affiliated with banks (the so-called investment banks). Federal Reserve examiners are in place at the four investment banks and, along with our SEC colleagues, are monitoring the conditions of the other primary dealers. In cooperation with the SEC and the investment banks themselves, we are evaluating the capital and liquidity positions of these firms with the objective of ensuring that they are strong enough to withstand severe stresses in the financial environment. In the past few months, these firms have raised capital and expanded their liquidity cushions to protect themselves against extreme events.

To formalize our effective working relationship, the SEC and the Federal Reserve recently agreed to a memorandum of understanding (MOU). Under the MOU, the SEC and the Fed will freely share information and analyses pertaining to the financial conditions of primary dealers. The two agencies have also agreed to work jointly with the firms to support their continued efforts to strengthen their balance sheets, their liquidity, and their risk-management practices.

Fed-SEC cooperation is taking place within the existing statutory framework with the objective of addressing the near-term situation. In the longer term, legislation may be needed to provide a more robust framework for the prudential supervision of investment banks and other large securities dealers. In particular, under current arrangements, the SEC's oversight of the holding companies of the major investment banks is based on a voluntary agreement

between the SEC and those firms. Strong holding company oversight is essential and thus, in my view, the Congress should consider requiring consolidated supervision of those firms, providing the regulator the authority to set standards for capital, liquidity holdings, and risk management.<sup>2</sup> More generally, in the longer term, the Congress should consider whether our current regulatory structure needs to be modernized to address the changes that have occurred in the structure of the financial system, including the enormous growth of nonbank financial institutions and the development of new financial products.

### **Strengthening the financial infrastructure**

The potential vulnerability of the financial system to the collapse of Bear Stearns was exacerbated by weaknesses in the infrastructure of financial markets. For example, given current arrangements, Bear Stearns' counterparties on thousands of over-the-counter (OTC) derivatives contracts would likely have had serious difficulty promptly determining their vulnerability to counterparty losses. Furthermore, their efforts to replace the hedges provided by those contracts would have placed additional pressures on markets that already were quite stressed. Likewise, providers of short-term secured funding through repurchase agreements (repos) and other forms of secured funding, including money market mutual funds and other conservative investors, could have unexpectedly found themselves holding various forms of collateral rather than the liquid funds they were expecting. These investors would probably have been hard-pressed to dispose of this collateral and to manage their liquidity needs in a highly stressed environment. More generally, in this scenario, sharply increased uncertainty about the liquidity and financial strength of a wide range of counterparties would likely have greatly reduced the willingness of financial market participants to engage in normal transactions.

The Federal Reserve, together with other regulators and the private sector, is engaged in a broad effort to strengthen the financial infrastructure. In doing so, we aim not only to help make the financial system better able to withstand future shocks but also – by reducing the range of circumstances in which systemic stability concerns might prompt government intervention – to mitigate moral hazard and the problem of "too big to fail."<sup>3</sup> For example, since September 2005, the Federal Reserve Bank of New York has been providing leadership for a major joint initiative by the public and private sectors to improve arrangements for clearing and settling credit default swaps (CDS) and other OTC derivatives. As a result, derivatives dealers and other market participants have taken a number of steps to enhance post-trade processing of CDS, and in 2006, they expanded the effort to OTC equity derivatives. However, the infrastructure for managing these derivatives still is not as efficient or reliable as that for more mature markets, as was evident last summer, when a surge in CDS trading volume greatly increased backlogs of unconfirmed trades. The New York Fed and other supervisors are working with market participants to fundamentally change how CDS and other OTC derivatives are processed by applying increasingly stringent targets and performance standards. They are also emphasizing that dealers must demonstrate their capability to adequately manage the failure of a major counterparty, including calculating exposures rapidly, having clear management procedures, and conducting internal stress exercises. Finally, they are encouraging the development of well-regulated and prudently managed central counterparty clearing arrangements for CDS trades.

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<sup>2</sup> Bank-affiliated primary dealers are already subject to mandatory consolidated supervision, but the focus of that supervision has been on limiting risks to the banks and other insured depository institutions within the holding company. Existing provisions may need to be modified to provide regulatory authority to assess and limit risks to all functionally regulated entities, including securities subsidiaries, as well.

<sup>3</sup> On the problem of "too big to fail," see for example Gary Stern and Ron Feldman (2004), *Too Big to Fail: The Hazards of Bank Bailouts*, Washington: Brookings Institution Press.

The Federal Reserve and other authorities also are focusing on enhancing the resilience of the tri-party repo markets, in which the primary dealers and other large banks and broker-dealers obtain very large amounts of secured financing from money funds and other short-term, risk-averse investors. For some time we have been working with market participants to develop a contingency plan should there ever occur a loss of confidence in either of the two clearing banks that facilitate the settlement of tri-party repos. Recent experience, including Bear Stearns' liquidity problems, demonstrates the need for additional measures to enhance the resilience of these markets, including the development of contingency plans for dealing with the sudden loss of confidence in a large tri-party borrower. Given the critical role that these markets play in our financial system, we need to proceed in a prudent manner in making changes, especially as long as the broader financial markets are experiencing stress. Nonetheless, over time, a stronger financial system may require changes in the way borrowers and lenders use these markets, as well as in the settlement infrastructure operated by the clearing banks.

More generally, both the operational performance under stress of key payment and settlements systems and their ability to manage counterparty and market risks are critical to the stability of the broader financial system. Currently, the Federal Reserve relies on a patchwork of authorities, largely derived from our role as a banking supervisor, as well as on moral suasion to help ensure that the various payments and settlements systems have the necessary procedures and controls in place to manage their risks. By contrast, most major central banks around the world have an explicit statutory basis for their oversight of payment systems, and in recent years a growing number of central banks have been given statutory authority to oversee securities settlement systems as well. Given how important robust payment and settlement systems are to financial stability, a strong case can be made for granting the Federal Reserve explicit oversight authority for systemically important payment and settlement systems.

### **Preventing or mitigating future crises**

The financial turmoil is ongoing, and our efforts today are concentrated on helping the financial system return to more normal functioning. It is not too soon, however, to begin to think about the steps we might take to reduce the incidence and severity of future crises.

I have already noted the importance of strengthening capital, liquidity, and risk management at major financial institutions, including both commercial banks and investment banks. These efforts are already underway on a globally coordinated basis. Together with the improvements to the financial infrastructure I have just discussed, these steps should increase the resilience of the financial system in the face of shocks.

As I have noted, I believe that the Federal Reserve's actions to facilitate the acquisition of Bear Stearns, thereby preventing its bankruptcy and the disorderly liquidation of positions by its counterparties and creditors, were necessary and warranted to head off serious damage to the U.S. financial system and our economy. That said, the intended purpose of Federal Reserve lending is to provide liquidity to sound institutions. We used our lending powers to facilitate an acquisition of a failing institution only because no other tools were available to the Federal Reserve or any other government body for ensuring an orderly liquidation in a fragile market environment. As part of its review of how best to increase financial stability, and as has been suggested by Secretary Paulson, the Congress may wish to consider whether new tools are needed for ensuring an orderly liquidation of a systemically important securities firm that is on the verge of bankruptcy, together with a more formal process for deciding when to use those tools. Because the resolution of a failing securities firm might have fiscal implications, it would be appropriate for the Treasury to take a leading role in any such process, in consultation with the firm's regulator and other authorities.

The details of any such tools and of the associated decisionmaking process require more study. As Chairman Bair recently pointed out, one possible model is the process currently in

place under the Federal Deposit Insurance Corporation Improvement Act (FDICIA) for dealing with insolvent commercial banks. The FDICIA procedures give the Federal Deposit Insurance Corporation (FDIC) the authority to act as a receiver for an insolvent bank and to set up a bridge bank to facilitate an orderly liquidation of the firm. A bridge bank authority is an important mechanism for minimizing public losses from government intervention while imposing losses on shareholders and unsecured creditors, thereby limiting moral hazard and mitigating any adverse impact of government intervention on market discipline. The FDICIA law also requires that failing banks be resolved in a way that imposes the least cost to the government (in this case, to the deposit insurance fund), unless the Treasury, the FDIC, the Federal Reserve Board, and the President agree that following the least-cost route would entail significant systemic risk. The hurdle for using the so-called systemic risk exception is appropriately high, but the flexibility to respond in a true financial emergency is retained.

Designing analogous rules for the prompt and orderly resolution of securities firms is not straightforward, as these firms differ significantly from most commercial banks in their financing, business models, and in other ways.<sup>4</sup> Despite the complexities of designing a resolution regime for securities firms, I believe it is worth the effort. In particular, by setting a high bar for such actions, the adverse effects on market discipline could be minimized.

Another possible step to reduce the incidence and severity of financial crises, recently proposed in the Treasury blueprint for regulatory reform, would be to task the Federal Reserve with promoting the overall stability of financial markets. To some extent, the Fed already plays that role, and indeed its founding in 1913 was prompted largely by the desire of the Congress to address the problem of recurring financial panics. In recent decades, the Federal Reserve has figured prominently in the government's attempts to address a range of financial crises, in part because of the broad expertise derived from the Fed's wide range of activities. Moreover, the Fed is the only agency that has the power to serve as a liquidity provider of last resort, a power that has proved critical in financial crises throughout history.

That said, holding the Fed more formally accountable for promoting financial stability makes sense only if the institution's powers are consistent with its responsibilities. In particular, as a practical matter, I do not think that the Fed could fully meet these objectives without the authority to directly examine banks and other financial institutions that are subject to prudential regulation. During the recent financial turmoil, the ability of the Fed to obtain information directly from key institutions and from supervisory reviews has been invaluable for understanding financial developments and their implications for the economy. To fulfill its responsibilities, the Fed would also need to have the ability to look at financial firms as a whole, much as we do today when we exercise our umbrella authority over financial holding companies, and the authority to set expectations and require corrective actions as warranted in cases in which firms' actions have potential implications for financial stability. Finally, to identify financial vulnerabilities, the Fed would need general authority to collect information on the structure and workings of financial markets. In particular, the recent experience has clearly illustrated the importance, for the purpose of promoting financial stability, of having detailed information about money markets and the activities of borrowers and lenders in those markets.

If the Congress chooses to go in this direction, attention should be paid to the risk that market participants might incorrectly view the Fed as a source of unconditional support for financial institutions and markets, which could lead to an unacceptable reduction in market discipline. If the Federal Reserve's formal mandate were broadened to encompass financial stability, it would be particularly important to make clear that any government intervention to

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<sup>4</sup> For example, many securities firms book a large share of their assets at affiliates of the broker-dealer, including affiliates abroad that are subject to foreign bankruptcy laws.

avoid the disorderly liquidation of firms on the verge of bankruptcy should use clearly defined tools and processes, along the lines I discussed earlier.

## **Conclusion**

The financial turmoil since August underscores the need to find ways to make the financial system more resilient and stable. In my remarks today, I have noted several broad areas in which constructive work might be done, including improving the regulation and supervision of financial institutions, strengthening the financial infrastructure, and the possible development of a new resolution process for securities firms. In the longer term, it is up to the Congress to determine whether still broader reforms are needed. Making that determination will raise a host of complex and challenging issues, but the stakes are commensurately high.

Financial crises have occurred periodically around the world for literally hundreds of years, and it is unrealistic to hope that they can be entirely eliminated, especially while maintaining a dynamic and innovative financial system. Nonetheless, recent experience has illustrated once again that financial instability can have serious economic costs. The Federal Reserve will continue its efforts to make our financial system stronger and more resilient, so that it can continue to play its necessary role of supporting economic growth and making credit available to all qualified borrowers.