The current financial crisis is posing new challenges for central bankers and policymakers, taking them well beyond the traditional framework they have used to address previous crises. In part, these new steps reflect dramatic changes in the financial system—most notably a substantial growth in that part of the market not covered by traditional public safety nets, along with a rising complexity in financial instruments, counterparty risks, and institutional relationships on both a domestic and global basis.

These developments are complicating efforts to respond to the current crisis, while also revealing serious shortcomings in our crisis management framework. For example, many of the steps taken have raised important issues with regard to moral hazard and the subversion of market discipline, equitable treatment of different institutions and segments of the market, and public interference in credit allocation and other market processes.

These issues strongly suggest a need to look carefully at what we have done and consider what principles should guide any further steps we take in addressing the crisis. Moreover, it is appropriate to begin thinking about how we might construct a clearer set of rules and policies to help create more resilient financial markets and a better crisis management framework for responding to future events. Such thought should also include exit strategies for how we can terminate the numerous temporary assistance programs adopted in this crisis and restore the private market incentives we have sacrificed.

I will focus on three policy issues: (1) How will we determine which institutions are to be covered by the public safety net and, accordingly, subject to close supervision? (2) What is the appropriate scope for central bank lending? (3) How should we resolve solvency problems at nonbank financial institutions?

Before proceeding, though, I would like to briefly share my perspectives on some of the general lessons we have learned from the crisis.

**What have I learned?**

One of the most obvious observations from the current turmoil is that a crisis can stem from parts of the financial market not covered by traditional public safety nets. In past crises, we have typically been able to direct our efforts toward banks and other depository institutions where we have safety nets and a supervisory and regulatory framework to address institutional problems and restore market confidence. However, many of the institutions and markets now under stress are not subject to prudential oversight. They are not protected by well-defined safety nets and, when assistance is provided, do not have a framework in place to help address moral hazard and other policy issues.

Also, when confidence is fragile and the risk of contagion is great, central banks and other public authorities increasingly are compelled to provide extensive liquidity and other assistance to the nonbank portion of financial markets. In this regard, it is clear in the United States that whenever threats to financial stability occur, the financial markets, the public and the political authorities all look to the Federal Reserve to respond regardless of where the threats originated.

We should further acknowledge that an enormous burden has been placed on monetary policy to respond to the current crisis, although monetary policy is not designed to address many of the underlying factors, particularly when the problems extend beyond liquidity and raise issues...
In general, I favor limiting the scope of our federal safety net.

II. Risk-based capital standards may also encourage institutions to lower their capital, instead of building it up, in the prosperous times that typically precede a crisis.

I am also intrigued by the ideas presented at our Jackson Hole Symposium for making capital vary in a more beneficial way over the business cycle and during a crisis. One idea is the use of capital insurance to facilitate a financial institution’s recapitalization during a systemic financial crisis. Another related idea is mandatory debt-equity conversions to supplement capital in a financial crisis and to provide more discipline on the part of bondholders. As part of any such recapitalization, I support the mandatory cessation of dividend payments with the loss of earnings.

Supervisory oversight of institutions that affect an economy’s financial stability is important. And, the most difficult aspect of this is that we balance supervisory authority and capital requirements against the need to maintain financial innovation and not drive activities into less-regulated markets. This is one reason why I would prefer to limit the safety net to protecting the intermediation and payments mechanisms, while giving market forces much latitude as possible to guide financial innovation.

There may also be other ways that we can strengthen institutions and markets while lessening the need for safety nets. I have long supported increased public disclosure. With the information problems present in today’s markets, we need to work with market participants in a concerted effort to improve disclosures and remove as much of the complexity and opaqueness as we can.

What is the appropriate scope for central bank lending?

Traditional central bank lending has been through the discount window with eligibility generally restricted to depository institutions. For the most part, central bank lending also has been short-term and fully collateralized with sound assets. During the current crisis, though, the Federal Reserve and a number of other central banks have chosen to expand the use of their lending facilities.

For the Federal Reserve, these efforts have included a number of different measures: a Term Auction Facility designed to increase liquidity among depository institutions; an expanded securities lending program with broader collateral requirements to make illiquid securities more liquid; a primary dealer credit facility to increase liquidity at investment banks; lending to fund the resolution/workout of several large nonbank financial organizations; and most recently, funding to support money market mutual funds and the commercial paper market.

This broadening of central bank lending reflects, in part, the expanding role that nonbank financial institutions and more complex financial instruments play in the system. A key question now for central banks is: Should central bank lending return to its traditional role once the current crisis abates, or is this broader role the new reality?

Broadening the scope of central bank lending has raised a number of issues, some old and some new. A long-standing concern is that central bank lending should not be used to prop up insolvent institutions, allowing them to take further risks that could end up costing the taxpayer.

But the broadened scope of central bank lending raises new issues as well. For example, why should institutions and financial markets maintain much liquidity on their own if they know central banks are likely to provide it when needed? Related to this is the idea that central banks should have easier access to liquidity for a growing list of borrowers. In addition, an expanded role for the discount window may bring central banks more directly into allocating credit as collateral requirements are selectively relaxed and lending is used to support specific segments of the market.

While it may be too early to decide how central bank lending should be used going forward, we should start developing a framework. Here are some ideas that I suggest for consideration.

of solvency and informational shortcomings. Going forward, it will be essential that our financial system has a wider range of policy and market-based options to resolve crises, with less reliance being placed on monetary policy.

How will we determine which institutions should be covered by the safety net?

Because many of the problems in this crisis are linked to institutions and markets not covered by traditional public safety nets, we clearly need to rethink what our approach should be in providing assistance to these segments and, accordingly, in extending oversight and regulation to them.

As we begin to think about these issues, I believe it is important to have a clear understanding of what we are trying to accomplish. In my view, a public policy objective of maintaining financial stability should involve two key features: preventing credit disruptions emanating from financial markets and financial institutions from adversely affecting the broader economy, and maintaining the integrity and functioning of the payments system.

From a historical perspective, safety nets and supervision have been tailored to the specific charters under which financial institutions operate and offer products. As a result of competition and financial innovation, many of the distinctions between financial institutions and products are eroding. The current crisis along with this growing convergence among institutions, raises many questions about what criteria should be used and how far we should go in deciding which institutions should operate under safety nets and prudential supervision.

In general, I favor limiting the scope of our federal safety net. In a number of ways, we struggle in dealing with banks that are regarded as too big to fail and in finding the appropriate balance between market and supervisory discipline. Such problems would be greatly magnified if we were to permanently extend the safety net to encompass a growing range of institutions and markets. I am especially concerned that we could put ourselves in the position of mixing banking and commercial activities if we were to extend financial assistance to firms conducting a wide range of activities. Such assistance could put public authorities further into the process of allocating credit and selecting the winners and the losers in the marketplace.

Having said that, we still need to look carefully at the safety net issue and think about what we should do, given the likelihood we will have to deal with problems in the broader financial markets again. Can we design a more limited safety net for this part of the market, supported by an equally limited system of oversight and regulation? Can we accomplish this without stifling the type of innovation that makes our markets more efficient and more responsive to customer needs?

I am not sure any of us have a good answer to these questions. I have several suggestions focused on trying to lessen the need for safety nets. Because overleveraging has been a major problem during the current market meltdown, I would suggest extending some form of leverage standards—a minimum capital-to-assets ratio—to those portions of the market that have suffered from inadequate capital. This type of capital standard would also help reinforce the pressure that financial investors and creditors are now putting on firms to raise capital and clean up balance sheets.

In this regard, I have always supported simple leverage standards for financial institutions. If we extend capital standards to a broader range of firms, a leverage ratio seems more advisable to me than risk-based capital standards, which are likely to be far more complex, proycyclcal, and, in many ways, easier to evade. In fact, I am most concerned that any institution that tends to underestimate its risk exposure—as many recently have—will be just as likely to underestimate its capital needs if allowed to operate a risk-based capital standard, such as Basel
I have already indicated my preference for putting some bounds on the federal safety net. But if the discount window—as part of that safety net—is to be available to a broader range of institutions, then these institutions should be subject to some form of oversight and regulation to reduce moral hazard concerns. This oversight would help bring lending to nonbank financial institutions into closer conformity with that of depository institutions.

We should think of how central bank lending could be structured to keep it from being a subsidized source of liquidity. Because this lending is essentially a line of credit, one idea is to charge a fee for access, then require institutions seeking emergency access without a funded line of credit to pay a higher penalty rate.

A final consideration is how far central bank lending should be extended. The focus should be on protecting the intermediation process and the payments mechanism. Because of the credit allocation issues and other concerns, I would argue for at least drawing a sharp line between banking and commerce, with our discount window only used to fund institutions and markets that play a strictly financial role.

**How should we resolve solvency problems at nonbank financial institutions?**

One key issue arising out of the current crisis is our approach in dealing with nonbank institutions that face solvency crises. Major examples of this now include Bear Stearns, Lehman Brothers, AIG, and Fannie Mae and Freddie Mac. In each case, a unique approach has been followed. To some extent, these approaches reflect differences in the case, a unique approach has been followed. To some extent, these approaches reflect differences in the case, a unique approach has been followed. To some extent, these approaches reflect differences in the case, a unique approach has been followed.

For example, our bank resolution framework focuses on timely action to protect depositors and other claimants. Insured depositors at failing banks typically regain full and immediate access to their funds, while uninsured depositors often benefit from quick, partial payouts based on expected recoveries. Also, a continuation of many banking activities and relationships is likely to occur given such resolution options as deposit transfers and asset sales to other banks, purchase and assumption transactions, bridge banks, conservatorships, and open bank assistance. Other important features of the bank resolution framework include depositor preference statutes and a clear priority for handling other claimants, as well as an orderly receivership process with limited allowance for judicial intervention.

We have a system of prompt corrective action by supervisors and, in the case of failure, bank resolutions that impose the least possible cost on the FDIC. These provisions help promote a resolution of banking problems before they become magnified and more costly to the industry and, ultimately, to taxpayers. Requirements for least-cost resolutions and priority of claimants also help to put stockholders, subordinated debtholders and uninsured depositors at risk, thereby lessening some of the moral hazard concerns associated with the federal safety net. Exceptions to least-cost resolution can be made when the failure of an institution could pose a systemic risk, but even in such cases, regulators can still make stockholders and managers bear the risk of their actions.

I offer the thought that similar principles should be followed in setting up a resolution process for other types of financial institutions. The uncertainty that surrounded recent workouts of nonbank institutions has not only lowered market confidence, but also provided inconsistent treatment of stockholders and creditors. In addition, the bankruptcy of Lehman Brothers has raised doubts about how different claims will be handled and how long the court and receivership process will take.

In establishing a resolution process for nonbank financial institutions, there are a number of important principles to follow and several issues to consider. First, whatever the range of institutions granted access to the public safety net, we must design a process that limits moral hazard concerns and encourages market discipline. In particular, we must acknowledge that the market will make better decisions on capital and leveraging when investors and management are subject to the possibility of loss. As a result, nonbank resolutions or takeovers should leave stockholders and subordinated debtholders fully exposed to the losses in their firms. In the same way, such resolutions should provide for new management and directors either through a merger with a sound institution or the insertion of a new management team.

Other resolution steps should be structured to help ensure a continued flow of financial activities, especially with regard to custodial accounts and any short-term claims that might harm counterparties if not resolved in a timely manner. A continuity of operations could be facilitated through mergers, conservatorships, or something similar to the FDIC’s bridge-bank powers, especially for large institutions that might pose a systemic risk if their operations were disrupted.

I would also suggest using something similar to open-bank assistance for nonbank financial institutions that appear to be viable. However, it is only provided that the assistance is structured in a manner that does not subsidize stockholders or creditors or enable institutions to take on more risk. As in banking, the authority to take action in a timely manner would help to reduce losses and best protect customers and creditors and their access to accounts and funds.

A final set of issues is how to fund resolutions at nonbank financial institutions and who would be in charge of the process. In order to protect taxpayers, I believe that industry resources, wherever possible, should be used to provide the major source of funds—much like in banking with the deposit insurance fund. We should be giving thought to how such a fund could be established, particularly for less-regulated portions of the financial markets.

**Concluding comments**

It is clearly time to take a comprehensive look at our financial system and its regulation. We have experienced financial crises in many different parts of the world over the past few decades, and the current financial crisis may be the most extensive one we have experienced since the 1930s.

Over the last year, central banks and other public authorities have taken a nearly unprecedented series of steps—steps that virtually all of us would admit are well outside of our comfort zones. Also of concern to me is that recent public actions may result in unintended effects, most notably in terms of creating unwelcome incentives, unjustly favoring selected participants and segments of the financial markets, and putting taxpayers at significant risk.

To address these issues and concerns, we need to have a clearly understood framework to make our financial system more resilient in the face of unexpected events and to resolve problems in our financial markets when they invariably arise. In keeping with these objectives, I have tried to present a few ideas and basic principles for how we might structure public safety nets, discount window lending and resolutions of large nonbank financial institutions.

There are obviously many issues to be resolved as we go forward, and I will certainly be interested in finding out what ideas all of you have for longer-term reform.