It is a pleasure to be with you this evening. The events of the last year and three-quarters have brought matters of regulation and risk – your Institute’s focus – to the top of the list of concerns for national and international policymakers. Thank you for inviting me to share these remarks and participate in the panel discussion to follow.

In the past year, crises and resulting failures of a number of large internationally active financial firms have rippled across and weakened the global economy. Events demonstrated the glaring absence of resolution powers in the United States – except in the case of banks – and
demonstrated the limited ability of U.S. authorities to intervene in troubled non-depository financial institutions, at least before the passage of the TARP legislation.

This state of affairs left the United States lacking the tools to smoothly address the failures of “systemically important” institutions – those whose disorderly failure could potentially lead to a drop in confidence in the global banking system, seize-ups in credit markets, the collapse of other financial institutions, and worsening economic conditions. Many others, including Chairman Bernanke, have noted the urgent need to address the lack of resolution authority. Of course, difficulties dealing with financial troubles in several European countries have shown that the United States is not alone.

So clearly, the role played by financial institutions in the current crisis has laid bare the need to rethink how systemically important financial institutions should be regulated and, if they fail, how they should be resolved. As you know, policymakers in the U.S. and many other countries are right now working through the intricate and challenging issues associated with creating a more effective regulatory structure, making forums like this both timely and important.

In a recent talk, I expressed my view that we need to have organizations with explicit responsibility for financial stability (that is, charged with making sure that “contagious” failures of financial institutions do not occur, and alert to trends emerging across a swath of interconnected institutions and their counterparties). I argued in that talk that a regulator explicitly charged with addressing financial stability probably could have spotted some of the financial trends leading up to the crisis. In my remarks today, I would like to make some observations related to questions about the powers a systemic regulator would have needed in order to mitigate some of the problems we have seen.

As you consider the perspectives I share this evening, I encourage you to keep at the back of your mind the scale of these regulatory challenges. In the end we need to be able to address these
complex questions, and adequately empower those in the systemic-regulatory and resolution roles. If we cannot, we will do well to find other ways to limit systemic risks.

In particular I will focus on the need for a systemic regulator to be able to address firms’ global operations, and the increased use of financial derivatives. These are key issues because financial institutions are likely to have a larger global presence over time, and to be more active in financial derivatives. Both trends represent the normal outgrowth of globally integrated economies and financial markets, and are not necessarily unwelcome or unhealthy. But the critical point is that the roles and powers of supervisors and regulators have not kept up with these developments.

Allow me to make one important distinction at the outset. My remarks today touch on both systemic regulation and on the resolution of systemically important institutions. Clearly these roles could be carried out by either one entity or by two separate entities – a systemic regulator and a resolver of systemically important institutions. My remarks touch on both functions, while for simplicity I tend to refer in my own shorthand to a “systemic regulator” – but the distinction is important.

**Resolution of Systemically Important Institutions**

The financial crisis has highlighted the pressing need for better resolution procedures. For banking organizations, the FDIC has the ability to place banks under receivership without going through bankruptcy proceedings. However, these resolution powers apply only to banks, not other non-bank financial firms, and do not apply to bank holding companies.

The resolution power of the FDIC allows the FDIC to conduct an orderly resolution of the bank, which protects depositors and provides the least-cost solution to the government. In the case of bank holding companies and non-depository financial institutions, insolvency must be addressed in bankruptcy court. Unfortunately, bankruptcy procedures are designed to provide a clear priority
among creditors, but do not provide any special provisions for an insolvency that has broad systemic implications. In such situations, it is very possible that a preferable public policy would be to minimize systemic implications rather than follow the normal creditor priority set out in the bankruptcy code.

Consider this argument in relation to the Lehman Brothers failure. The government lacked any resolution powers in the case of investment banks, and Lehman had no immediate merger possibilities, so Lehman was forced to file for bankruptcy. The Lehman failure had broad implications for the financial system and economy. The firm was internationally active, engaged actively in derivatives contracts, and a counterparty to many other financial institutions. Figure 1, which shows legal proceedings resulting from the Lehman bankruptcy filing, is instructive.

Had there existed the authority and procedures to resolve Lehman outside of bankruptcy proceedings, there may have been a much more orderly “wind down” of Lehman’s operations. Of course, the Lehman failure suggests that even with resolution powers in place this would have been a very challenging situation – Lehman would have been difficult to wind down, in part because of the scope of its global operations.

Lehman Brothers operated in over 40 countries and had over 650 distinct legal operating entities outside of the United States. While there were many separate legal entities outside of the United States, the firm was managed globally — meaning many of its risk management and operating platforms stretched across its many distinct entities.

In the event Lehman Brothers had been placed in receivership in the United States, it is unclear how Lehman’s operations outside the United States would have been treated in foreign jurisdictions. In such situations it is possible that a country would try to “ring fence” assets so that liability holders in the country would be paid prior to returning funds to a foreign parent.
Such a situation raises a number of interesting questions concerning the role of a systemic regulator. I would like to provide my own perspective on some of these questions – “straw man” approaches, if you will:

- First, for globally active and systemically important U.S. institutions, I suspect that the potential disruptions to operations associated with ring fencing will likely mean that capital support of foreign operations (that is, capital injections) will be a critical part of the resolution procedures. As a consequence, the systemic regulator would need to have the power to inject capital or request that the Treasury inject capital.

- Second, given the speed with which failures have occurred, it may be difficult to incorporate legislative oversight of the resolution process in the short-term – so an understanding of such arrangements should be worked out between Congress and the systemic regulator.

- Third, international agreements on receivership procedures for globally active institutions will be necessary. What institutions or agencies will have a role in negotiating these procedures? I certainly believe that a systemic regulator should have a role.

- Fourth, I would note that policymakers will have to sort out the appropriate uses of conservatorship (operating the bank as a going concern) versus receivership (which has the goal of liquidation) in the case of systemically important institutions.

- Fifth, a systemic regulator may need the ability to require reductions in foreign exposures as a systemically important financial institution encounters problems. This might include the ability to require that foreign subsidiaries and branches be sold to avoid broader systemic problems, as financial problems increase.

- Sixth, perhaps the systemic regulator will need to be able to influence the “home/host” rules that govern the division of labor in the supervision of internationally active firms.
• Seventh, a systemic regulator may need the ability to require higher capital requirements for globally active financial institutions that will be difficult to resolve if they become insolvent.

Beyond these challenges related to global operations, a second problem highlighted by the crisis is the difficulty in managing the derivatives book of global financial institutions. While derivatives contracts were a problem in the case of Lehman’s failure, they were particularly acute in the case of American International Group (AIG). Because of the presence of complicated, interrelated financial contracts the unwinding of the derivatives positions of AIG has been costly and time consuming.

Increasingly, derivatives and other forms of structured finance are inherent in the operations of large global financial institutions. However, the presence of a small number of global financial institutions as significant counterparties or dealers in the derivatives markets has made such institutions very difficult to resolve, whether through bankruptcy or through receivership. This raises several interesting issues and questions, which I will provide my own current views on:

• First and very importantly, I believe a systemic regulator should have the ability to require that transactions be moved to an exchange as the contract becomes standardized and widely used.

• Second, I believe that in finding the most efficient way to resolve complicated financial transactions in the event a major player becomes insolvent, the systemic regulator would need the ability to explore whether bankruptcy, receivership, conservatorship, or governmental equity ownership would provide the best model for resolving complicated financial transactions that affect a large number of financial institutions around the globe.
• Third, a systemic regulator may need the ability to require financial institutions to reduce their derivatives exposure as they become financially troubled. This might include the ability to require the selling of broker or dealer operations in major markets as a firm’s financial position deteriorates.

• Fourth, a systemic regulator will likely need the ability to require higher capital requirements for firms that are active counterparties or dealers in complicated financial products.

Future Resolution Challenges

While the problems of 2008 highlighted the difficulty of resolving financial institutions with large global operations and active involvement in derivatives, these problems are likely to be even more important in the future. Figure 2 highlights the importance of foreign banking operations for U.S. commercial banks. Looking forward, as more and more customers of financial institutions are either global themselves, or have supply lines and sales channels that are global, they will expect their financial institutions to have global operations. U.S. banks that are internationally active hold 18 percent of assets in foreign offices. Over time, foreign operations seem more likely to grow than contract in an increasingly global economy.

As U.S. financial institutions become more involved around the globe, it is likely that these institutions will become more important in their host countries and more difficult to resolve should they become financially troubled. In this regard, I would suggest the following about some of the key issues that will emerge:

• First, a key issue will involve the willingness of home and host countries to supervise and, more importantly, potentially bear the burden of financially supporting the operations of a
large and systemically important financial institution, if it becomes troubled. This could alter what we have traditionally seen as the roles of home and host supervisors.

- Second, it will be important to determine how best to structure U.S. financial firms abroad, to minimize the potential for disruption if the firm becomes insolvent.

Of course, foreign firms have significant involvement in the U.S. economy. Figure 3 shows the share of U.S. bank assets held by foreign owners. British, Canadian, German, and Swiss banks all have a major presence in the United States. Some foreign banks operate large subsidiaries in the United States; others have very large branch operations. As a result, if the parent company has financial problems, it can have a downstream impact on the U.S. economy. Should foreign banks shrink as a result of financial problems, U.S. borrowers may find it more difficult to secure financing. This too raises several questions, about which I observe the following:

- First, it will be important to determine whether there should be a preference for branch versus subsidiary structures in systemically important institutions.
- Second, where the financial institutions are large relative to the size of the home country, there will need to be expectations and obligations of the home country. How explicit these should be will need to be determined. We should note that in some countries, systemically important financial institutions figure very prominently in the country’s economy – more so, in relation to the country’s GDP, than any one U.S. financial institution does in relation to U.S. GDP.

Derivatives contracts have become increasingly important for financial institutions – to support their customers, to serve as brokers or dealers, and to hedge their own positions. Over time,
the size of the gross derivatives positions of the five largest commercial banking organizations most engaged in derivatives activity has become quite large relative to their assets (Figure 4). These positions are likely to get larger over time, and substantial derivatives operations are likely to be important for more and more financial institutions. Given their complexity and likely growth, we need to explore the implications for bank regulation and the role of a systemic regulator, and indeed to better understand their potential impact.6

Concluding Observations

Greater integration of the world economy and financial markets is both desirable and inevitable. However, our ability to manage insolvency risk of key players has not grown with these developments. The presence of globally active financial institutions involved in derivatives operations world-wide requires a major rethinking of how we supervise and regulate systemically important institutions. Until global resolution policies are adopted, resolution of internationally active organizations will remain problematic.

Both issues I have discussed today – global activity and derivatives involvement – would be important for any regulator charged with systemic responsibilities. Of course, a systemic regulator will need to consider many other issues besides the two I have highlighted today – including issues like leverage, liability management, and securitization – but given the constraints on time these additional issues will have to be a topic for another day.

Bankruptcy laws and resolution procedures are national. Home country financial supervisors have a national focus, and bank regulations apply within the firms’ national borders. However, as financial firms increasingly span national borders, much greater coordination is necessary. This is particularly true as the size of financial institutions’ on- and off-balance sheet exposures become large relative to the home country’s financial capacity to provide emergency support to the financial
institution. In some countries the focus of financial institution resolution has seemingly been the protection of government-run deposit-insurance programs – a local mindset at odds with a potentially global issue. Increasingly their attention will need to focus on potential systemic problems with global ramifications.

I hope my remarks today have provided a sense of the urgency, and also the complexity, of these issues. I have given my own views on some of the key questions that policymakers must ultimately consider. I’ll conclude by noting that the complexity of these issues makes it no less important that we address them, for the good of all participants in our economies.

Thank you.

NOTES:

1 Of course, the views I express today are my own, not necessarily those of my colleagues on the Board of Governors or the Federal Open Market Committee (the FOMC).

2 In remarks on April 14, 2009, Chairman Bernanke noted that “Large, complex financial institutions tend to be highly interconnected with other firms and markets... For example, AIG… [A] disorderly failure of AIG would have put at risk not only the company's own customers and creditors but the entire global financial system. Historical experience shows that, once begun, a financial panic can spread rapidly and unpredictably; indeed, the failure of Lehman Brothers a day earlier, which the Fed and the Treasury unsuccessfully tried to prevent, resulted in the freezing up of a wide range of credit markets, with extremely serious consequences for the world economy. The financial and economic risks posed by a collapse of AIG would have been at least as great as those created by the demise of Lehman. In the case of AIG, financial market participants were keenly aware that many major financial institutions around the world were insured by or had lent funds to the company. The company's failure would thus likely have led to a further sharp decline in confidence in the global banking system and possibly to the collapse of other major financial institutions. At best, the consequences of AIG's failure would have been a significant intensification of an already severe financial crisis and a further worsening of economic conditions. Conceivably, its failure could have triggered a 1930s-style global financial and economic meltdown, with catastrophic implications for production, incomes, and jobs.” (from “Four Questions about the Financial Crisis,” available at http://www.federalreserve.gov/newsevents/speech/bernanke20090414a.htm)

3 In remarks on April 14, 2009, Chairman Bernanke noted “that federal regulators urgently need a new set of procedures for dealing with a complex, systemically important financial institution on the brink of failure. Such rules already exists for banks: If a bank approaches insolvency, the FDIC is empowered to intervene as needed to protect depositors, sell the bank's assets, and take any necessary steps to prevent broader consequences to the financial system. However, for an insurance conglomerate like AIG, or for a large financial holding company that owns many subsidiary companies, these rules do not apply. Among other things, a good system for resolving nonbank financial institutions would allow federal regulators to unwind a failing company in ways that minimize disruptions in financial markets. An
effective regime would also provide the authorities greater latitude to negotiate with creditors and to modify contracts entered into by the company, including contracts that set bonuses and other compensation for management. (from “Four Questions about the Financial Crisis,” available at http://www.federalreserve.gov/newsevents/speech/bernanke20090414a.htm)


5 As I have noted in earlier talks, unlike most prudential supervisors that focus on the solvency of individual financial institutions, a financial-stability regulator would clearly need to take more of a “macro” perspective on financial trends (and their crosscurrents and unintended consequences). My assumption is that a financial-stability regulator would be charged with making sure that what I will call “contagious” failures of financial institutions do not occur. Such failures could involve a large group of financial intermediaries, all with a prominent shared risk exposure, or could involve one key player becoming insolvent but many other financial institutions failing because of their exposure as counterparties to that institution. This definition does not require that the involved organizations are depository institutions, nor does it hinge on the presence of deposit insurance. A key point is that the systemic regulator cannot just look institution by institution, but needs to think about the potentially difficult trends emerging across a swath of interconnected institutions and their counterparties. And while it may go without saying, for a systemic regulator to be effective, the regulator needs to be able to identify whether actual systemic problems are emerging. This involves, in part, assessing the “feedback effects” that might result from initial problems.

6 As I noted in a recent speech, an effective systemic regulator would need to have very detailed understanding of institutional practices and products – simply put, how things really work, in good times and bad. For example, the complexities of the servicing business model and the reasons why it presents challenges in a declining market. Another example is the market for credit default swaps, which ballooned but still seems less well understood than is desirable.
Figure 1
Legal Proceedings as a Result of Lehman Brothers Holdings Inc. Bankruptcy Filing
as of February 11, 2009

Figure 2
Internationally Active U.S. Banking Organizations: Share of Banking Assets in Foreign Offices
as of Year End, 1990 - 2008

Note: Internationally active U.S. banking organizations are defined as U.S. banking organizations with assets in foreign offices.

Source: Bank Call Reports
Figure 3
Share of U.S. Commercial Banking Assets Owned by Foreign Banking Organizations
as of Year End, 1990 - 2008

Note: Includes U.S. branches and agencies of foreign banks and U.S. commercial bank subsidiaries of foreign banking organizations.

Source: Federal Reserve Board
Figure 4
Top 5 U.S. Banking Organizations in Derivatives: Notional Amount of Derivatives Contracts as a Percent of Assets
as of Year End, 1997 - 2008

Source: Bank Call Reports