I'm pleased to have this opportunity to discuss a vitally important subject—preventing banking crises from a regulatory perspective. This conference is an excellent forum for sharing information on the causes and consequences of past crises and discussing alternatives for resolving crises when they occur. How have different countries addressed this challenge? What are the advantages of each approach? Most importantly, this conference provides an opportunity to discuss how to design regulatory oversight to prevent future crises.

Today I'd like to provide a broad overview of what constitutes effective regulation and more specifically how supervisors can prevent a crisis situation. First, I'll review the basic elements that are essential for a healthy banking system and effective supervision. Then I'd like to briefly discuss a few innovative regulatory approaches that have been proposed in recent years.

One of the major points I'd like to stress today is the importance of focusing on preventing bank crises. The prompt resolution of a banking crisis is important, of course. But I believe regulators spend too much time preparing to pick up the pieces in case a crisis occurs. We can spend less time on crisis resolution by spending more time on prevention.

What's the best way to prevent a crisis? That's the second point I'd like to stress. In my view, supervisors have a underutilized tool at their disposal—market forces. It's essential that supervisors take advantage of market forces and incentive-compatible approaches whenever possible. It's the most efficient, effective way to accomplish our regulatory goals.

The need for supervision

First, I'd like to quickly review why we need bank supervision in market economies. The role of a regulator is very different where the state controls a bank's decisions. In short, credit allocation in
response to political pressures is much different than allocation in response to market forces. I want to emphasize that my comments will be mainly focused on regulation's role in private-market economies.

Why is regulatory oversight necessary? It's difficult to argue for government intervention in markets that are perfect and efficient. The decisions of individual agents in the economy should promote the general public interest unless there are distorting factors. However, there are times when the costs and benefits to an individual agent may diverge from the costs and benefits to society. That's when there's a role for regulation.

Banking is generally considered to require such intervention. One reason is that banks are highly leveraged, with a low ratio of capital to assets compared to other types of firms. Banks also have assets that are typically somewhat opaque. Investors don't have as much information on a bank's condition as bank management does. This asymmetric information between banks and investors makes it difficult to determine whether banks are healthy during times of stress.

The potential for spillover from one institution to another is higher in banking than in other industries because banks are typically closely intertwined through interbank borrowings and through balances and payments clearing arrangements. This potential for systemic risk—the possibility that the whole process could multiply until there's a full-fledged banking panic—is one of the major reasons that central bankers are paid to worry.

I should note that the purpose of regulation is not to avoid all bank failures. As Federal Reserve Chairman Alan Greenspan has pointed out, the optimal number of bank failures is not zero. Banks need to incur risk if they are to play a useful role in the economy.

Regulations are developed with the best of intentions, of course. But the law of unintended consequences comes into play. Sometimes regulations meant to address market failure are the root cause of banking industry problems. You're all familiar with the list of usual suspects...moral hazard, regulatory forbearance, and distorted incentives resulting from the mispricing of the safety net.

Such regulatory problems have been the underlying cause of industry problems in several countries. In the U.S. we're paying dearly for having poorly structured regulations and inadequate supervision of our saving and loan associations. It's estimated that the failure of hundreds of S&L's will ultimately cost American taxpayers anywhere from $175 billion to $225 billion.

The causes of financial crises

What causes a financial crisis, such as the problems in the S&L industry? There's generally one of two reasons: macroeconomic instability or microeconomic problems.

The major cause by far of financial crisis is an unstable economy. The U.S. banking system, for example, has been extremely stable in the absence of severe macroeconomic shocks. An unstable economy leads to deteriorating asset quality, price bubbles, and wide swings in asset prices and exchange rates. This obviously imposes strains on the fundamental business of banking and can lead to system-wide problems.
Economic instability may also increase problems because there's a natural tendency to forget about the bad times. Banks sometimes exacerbate the business cycle during an economic upswing by weakening credit standards and driving up asset prices.

A banking crisis is generally triggered by macroeconomic shocks, but it can be made significantly worse by microeconomic structural problems. These include inadequate corporate governance; distorted incentives generated by flawed regulatory arrangements; illegal activities such as insider lending and fraud; and poor management practices. These shortcomings can allow a relatively minor problem to grow into a major one.

**Preventing bank crises**

That brings me to the question of the day—how do we prevent banking crises? The solutions fall into three interdependent categories:

- One—developing sound macroeconomic policy;
- Two—building an appropriate infrastructure; and
- Three—following guiding regulatory principles.

First, the need for sound economic policy is self evident. Some would argue that creating the environment for stable growth is the single most important solution. It's also typically the major responsibility of central banks around the world. Nevertheless, economic instability continues to be the major cause of financial crises.

The second category is building an appropriate infrastructure. I'm referring to fundamental infrastructure requirements, which are necessary for a stable banking industry. Among the key components are:

- One, a system of laws and rules for corporate governance and property rights. This includes laws covering bankruptcy and the rights of creditors in seizing or disposing of assets;
- Two, a uniform set of transparent accounting standards, statements, and supporting schedules and reports;
- Three, a facility providing for external bank auditors and examiners; and
- Four—rules for public disclosure of nonproprietary financial information.

Most of these elements are outside the direct control of banks and bank supervisors. But they're vital to the work of regulators and to the ability of the market to evaluate the performance of banks. For developing and transitioning economies, these elements should be in place before the banking system is privatized. For developed countries, it's important to realize that having only some, but not all, of these elements is a recipe for trouble.
The accounting system is perhaps the most basic to the efficiency of the financial markets. The rules for preparing financial statements must be clearly specified. These statements communicate vital information to creditors, investors, commercial counterparts, and regulators.

The need for public disclosure is closely related to the standardization of accounting principles. The question is not whether financial statements should be available to the public. The question is how often they should be provided and the appropriate amount of information they should include.

There's a limited need role for regulation if markets have both the relevant information and the capability to adequately discipline banks. If markets have the ability to discipline, but lack complete information, regulators should focus on ensuring adequate disclosure.

The general level of public disclosure has increased as financial markets have demanded more and better information from all firms. This is particularly true in banking where there is a need for better information on hidden reserves, loan loss provisions, and non-performing loans.

The benefit of disclosure is one of the lessons we've learned from the derivatives debacles of the last few years. Regulations requiring firms to disclose both their ex ante rationale as well as the ex post performance would have meant a much quicker unwinding of many derivative positions. This would have prevented the large losses that occurred.

I'm not arguing that disclosure is a cure-all. Not everyone agrees that depositors are able to interpret disclosures. And the conventional notion that 'more disclosure is better' ignores the fact that some of this information might be useless to the market. A much higher level of disclosure might make it more difficult for market participants to extract useful information. And forcing the disclosure of strategic and proprietary information might hamper the efficient operation of firms.

We shouldn't forget these potential drawbacks. But it's my opinion that more disclosure is generally preferred to less. Disclosure and the market discipline it fosters are an important part of the regulator's arsenal.

The BIS recently noted that disclosure is an effective compliment to regulation in its Core Principles for Effective Banking Supervision. The committee has also set up a sub-group to study disclosure issues and provide guidance to the banking industry. In the U.S., the SEC and FASB have developed proposals on the disclosure and accounting for derivatives. Efforts such as these are steps in the right direction.

Principles driving bank regulation

So far I've discussed two of the three key factors for preventing bank crises. Now I'd like to turn to the last one—following guiding regulatory principles. I'd like to suggest three fundamental principles that should guide regulatory policy:
• Regulation should be goal-oriented;

• Regulation should not discourage appropriate changes in technology and market structure; and

• Regulation should be efficient at accomplishing its stated goals.

First, regulation should be goal-oriented, not process-oriented. We should start by asking the question, “Do our regulations help us accomplish our fundamental public-policy objectives?”

It’s important to avoid being wedded to past approaches. They’re simply a means for achieving a goal, not the goal itself. This may seem obvious, but it’s remarkable how often this basic principle is ignored.

I’ve observed the regulatory process, both from the inside and the outside, for more than twenty-five years. I’d say that most supervisors take the current regulatory framework as a given. Regulatory “innovation” usually takes the form of looking for better ways of applying the current framework. In some cases, regulators are constrained by laws they are required to carry out. But in my experience, regulators can do more to focus on their fundamental goals.

The second principle is that regulation should not discourage appropriate changes in technology and market structure. Again, this principle seems obvious, but it’s rarely applied. Instead, we often see regulatory approaches still being used long after they’ve been rendered obsolete by technological change.

Regulation should be constructed to be self-evolving, if possible. Regulatory change that’s dependent on the actions of cumbersome political bodies—either national or international—are generally difficult to implement. It’s better to have a structure that’s designed to evolve with the industry. This is easier said than done, of course. But it’s an important principle to keep in mind.

The third principle is that regulatory goals should be accomplished in the most efficient way possible. I would say that a regulatory approach is efficient if it accomplishes the desired goal with the least amount of “collateral damage” to the industry’s activity. In other words, supervisors should use the least intrusive approach that achieves the goals. One of the keys to efficient regulation is taking advantage of market mechanisms or using incentive-compatible approaches. I should note, though, that it’s essential to have the appropriate infrastructure in place before relying on market-driven mechanisms.

The first questions for a regulator should be, “Is government regulation necessary? Is it possible to use market forces to regulate?” The main roadblock to market regulation may be the existence of barriers to free entry. If that’s the case, regulators should focus on removing these barriers, if possible. Ironically, these barriers are often created by the government in the first place.

Another means for achieving regulatory efficiency is taking advantage of incentives. Under “incentive-compatibility,” the regulator seeks to align the incentives of firms with societal goals. In other words, this approach makes it in the firms’ own self-interest to efficiently achieve the regulatory objectives.
I should mention that it's somewhat misleading to use the word “deregulation” to describe the process of developing more efficient regulatory approaches. Our regulatory goals haven't changed. In that sense, we're not “deregulating” at all. You might say we're “smart-regulating”-achieving the same regulatory goals in a better way.

Reform proposals

Now I'd like to quickly review three reform proposals, keeping in mind the regulatory principles I've just mentioned. I want to emphasize the incentive-compatible nature of these proposals. As you know, the moral hazard problems created by a mispriced safety net has generated much debate as well as a number of proposals aimed at resolving these problems. In particular, there is support for implementing deposit insurance reform in the U.S., now that banking conditions are relatively good.

I'd like to briefly discuss three reform proposals:

• first, the narrow bank;

• second, significantly decreasing the safety net and increasing the role of disclosure; and

• third, altering the capital structure to emphasize the role of subordinated debt.

The narrow bank proposal would limit insurance coverage to a “narrow” class of deposits, which would be “covered” by extremely safe and liquid assets. Activities outside this narrow class of deposits wouldn't be covered by the insurance fund. The market would discipline all other activities. This proposal satisfies the regulatory principles laid out above, but depends on the completeness of the infrastructure, and the credibility of the government to keep the safety net within the stated limits. No country has implemented this proposal to my knowledge.

The second proposal is to decrease the safety net and increase the role of disclosure and market discipline. This approach is grounded in the contention that the systemic implications of banking failures are relatively limited. Proponents contend that the private sector can adequately oversee the activities of the banking industry if it's given adequate information.

This approach is being tried in New Zealand. Banks in New Zealand have been required to make detailed disclosure statements since the middle of 1996—including information about credit ratings, guarantees, impaired assets, material exposure, and capital adequacy. A number of regulatory structures were removed in return, including deposit insurance.

A two-page summary of these disclosures is displayed in every branch to help depositors decide the creditworthiness of the institution. The central bank of New Zealand is not responsible for bailing out depositors. The presumption is that depositors no longer need government protection with full disclosure. This approach obviously requires a well-developed infrastructure with a free flow of information.

The third proposal is increasing the role of subordinated debt in the capital structure of banks. This proposal is designed to decrease the moral hazard problem, increase market discipline, and provide for an improved process of resolving failures. A command regulation approach to moral hazard would
have regulators mandate a maximum level of risk for any insured bank. This approach has the typical problems associated with command regulation. First, it's difficult for regulators to accurately measure the risk associated with a bank's loan portfolio. Second, any credible effort to accurately measure this risk is likely to be extremely intrusive. And finally, a one-size-fits-all restriction may actually prevent capital from flowing to valuable investment projects.

Utilizing subordinated debt may resolve these problems. Proponents of this approach argue that debt holders are a superior buffer against income variations for both depositors and the insurance fund. The reasoning is that debt holders have an incentive to avoid banks with riskier portfolios, unlike equity holders. Additionally, debt-holders can help maintain an orderly failure resolution process. Uninsured depositors may trigger a bank run when asset quality is questioned. Debt holders can only “walk” away from the bank as their issues come due.

This proposal is consistent with the regulatory principles I discussed. It requires an adequate infrastructure, including mature capital markets, to allow for the required market discipline. We've recently seen this concept implemented in Argentina. It has also been proposed in the U.S. as an extension to a reform proposal emphasizing market discipline recently released by the Bankers Roundtable.

I believe each of these proposal are in keeping with the principles I've outlined and warrant additional consideration. It's encouraging to me that they are being considered by countries represented in this audience.

Let me conclude by noting that it's clear that financial and economic liberalization combined with globalization have changed the contours of the world financial system. Interest rate and exchange rate volatility have increased, competition among financial institutions has intensified, and new financial products are being developed continuously. In the face of these changes, banks around the world have had to develop new markets and services to maintain profits and meet the growing needs of customers.

The changing financial environment has presented important new challenges for regulators. Most notably, supervisors need to adapt regulations to changing market realities, improve the infrastructure undergirding the financial system, and coordinate supervisory and regulatory efforts internationally. As we undertake these difficult tasks, I hope we will focus on preventing bank crises and work to take advantage of market forces and incentive-compatible approaches whenever possible.

Thank you.