Ladies and gentlemen, it is my pleasure participating in this panel session. Its topic, “Policies to stabilize financial markets,” covers a very wide set of extremely complex issues, but given the time I am allotted, I have found it wiser to concentrate on only two of them:

- How explicit should the mandate of central banks be for maintaining financial stability?
- What instruments should be available to central banks, in order to fulfill this mandate?

1. An Explicit Mandate for Central Banks

As we all know, one of the most striking and unanticipated features of the current financial crisis was that shocks to the relatively small subprime market could provoke the distress of vital parts of the financial infrastructure, especially interbank and money markets.

As argued by Ricardo Caballero in his presentation in this conference, the main reason behind this surprising overreaction was probably the huge uncertainty of all market participants about the impact that a decline in real estate prices and the beginning of a recession would have on a sizable fraction of the assets held by the large banks.
And these banks are precisely the main participants in liquidity markets, that are vital to modern economies.

Confronted with this freezing of money markets, central banks did what they could to substitute these failing markets. In parallel, public authorities, all over the world, injected massive amounts of capital and provided all sorts of guarantees to financial institutions, in the hope to restart these vital markets. Now we know what it takes for a central bank to maintain financial stability. This was a largely theoretical question before September 2007, but we can now measure the cost of a set of unprepared interventions to do so. It seems warranted to envisage less costly ways to maintain financial stability in the future, when the next financial crisis occurs.

For one thing, it would be extremely worrisome to let market participants consider that, in the future, all large financial institutions will always be rescued (and their creditors insured) if they are again in a situation of financial distress. Taxpayers of many countries would probably not accept a second time the sort of blanket guarantees that governments have committed to provide to large financial institutions, in the hope to maintain financial stability. This is where the question of an explicit mandate for maintaining financial stability becomes important.

In my opinion, the main objective of macro-prudential regulation (I am leaving aside monetary policy and fiscal policy, which are of course important complementary tools, as they are dealt with elsewhere in this conference) should be to protect markets, not banks! It would be important to replace the rather vague objective of “maintaining financial stability,” which gives too much discretion to central banks and opens the door to lobbying by large institutions and political pressure, by a precise mandate. This mandate would be to guarantee the integrity of a precise list of financial markets and infrastructures that are deemed “vital”: interbank and money markets, as well as some derivative markets and large value payment systems. To do so, it would be useful to learn from the experience of private clearing houses, who have elaborated sophisticated policies for protecting themselves against the failure of their participants. Typically, private clearing houses distinguish between their members, who have
a privileged status, and ordinary participants. In counterpart to their privileged status, the clearing members are typically required to implement a set of risk mitigation policies, such as collateral and capital requirements and bilateral credit limits. I believe central banks could adopt a similar policy, and condition the direct participation of financial institutions to the “vital” part of the financial infrastructure on special requirements (such as solvency and liquidity requirements) that would go beyond the standard requirements imposed on deposit-taking institutions by micro-prudential regulators.

Many commentators have argued that the lack of transparency of interbank exposures on money markets and derivatives have played a major role in the propagation of the crisis. Over-the-counter (OTC) transactions are typically very opaque and can be a major source of systemic risk. Secretary Geithner has fostered the development of central clearing platforms for credit derivatives. In the same vein, more centralization could be a way to stabilize interbank markets. For example, banks would be offered the choice between a centralized market for liquidity, which would be insured and supervised by the central bank, and OTC transactions that would remain risky and, as such, associated with regulatory capital charges.

In effect, my proposal would aim at replacing the notion of “systemically important institution” with that of “systemically important market.” Such markets would only be directly accessible to a group of “officially recognized financial institutions” that would have to comply with special regulatory requirements and would be directly supervised by the central bank. The status of “officially recognized financial institution” could be revoked by the central bank if these special regulatory requirements are not satisfied. A special resolution procedure would be created for these institutions, so that the central bank has the legal powers to close it down, or at least restrict its activities before it is too late.

“Officially recognized financial institutions” would be the equivalent of existing “systemically important institutions,” who have access to special liquidity assistance facilities and possible government guarantees in case of distress. But there would be an important difference: It is the central bank that would choose who belongs to the club! If
the advantages associated with membership far exceeded the costs, the threat of revoking the status would work as an important disciplining device. OTC markets would still be active but, because they would be penalized by regulation, it is likely that they would become small, and therefore not in a position to jeopardize the entire system.

2. Imagining New Regulatory Instruments

The second idea I would like to put forward today is the notion that more instruments are needed for regulators to be effectively in a position to curb systemic risk. We all made a big mistake by considering that capital requirements alone would be sufficient to simultaneously fulfill two objectives:

- Absorb a sufficient fraction of the banks’ losses in case of a crisis;
- Limit the incentives for risk taking by banks’ managers.

Several interesting proposals have been made to complement (properly recalibrated) capital requirements, such as liquidity requirements and capital insurance mechanisms. I want to discuss here another type of regulatory instrument that is much more controversial, namely some form of constraint on bankers’ pay. There is, of course, a strong resistance to this idea by the banking profession, who see it as an intolerable intrusion into private contractual relations between banks’ shareholders and their employees. Symmetrically, an extreme form of this proposal has received some support by the press and the general public, who claim that large bonuses should not be paid to the managers of banks that have lost so much money. I will avoid any of the simplistic or ideological arguments used on both sides of the polemic, and will start with some simple remarks:

- It is hard to deny that many banks have taken excessive risks, by using, as much as they could, all the instruments they had at their disposal: leverage, maturity transformation, exposure to macroeconomic shocks …
- Banks’ shareholders have ultimately lost a lot of money, but in the years before the crisis, the return on equity of banks had been comfortable, as a result of the huge pressure for yield by financial markets and analysts.
• Similarly, many bank managers lost a lot of money, but most of them had been able to accumulate fortunes before the crisis.

In fact several recent academic studies show that the banks that took the biggest risks (and incurred the largest losses) were precisely the ones that had given the largest equity stakes to their top management, and therefore aligned their managers’ incentives with those of shareholders. So contrarily to a common opinion, the main explanation behind excessive risk taking by the banks was not a corporate governance problem between the banks’ shareholders and managers. Even if ex-post they both lost a lot of money, the very risky positions taken by the banks were probably, ex-ante, in the best interests of shareholders (and managers).

On the other hand, these very risky positions were clearly not in the best interests of taxpayers. In fact, as clearly advocated by Bebchuk and Spamann in a recent discussion paper of Harvard Law School, the problem is not that managers had different interests than shareholders, but that shareholders had different interests than society as a whole. This is simply because of the limited liability of shareholders; any losses that exceed the equity buffer of a bank are borne by the FDIC or by the Treasury, not by shareholders, who benefit from a limited liability option. Capital adequacy requirements were supposed to limit the value of this limited liability option, and decrease the incentives for excessive risk taking. But it simply did not work, because capital requirements are in the end a very indirect and inefficient way to curb managers’ incentives. Moreover competition between managers has a perverse effect: It exacerbates the excessive pressure for yield that comes from the limited liability of shareholders. Bank managers who would have decided to limit their risks would probably have been fired by their boards of directors.

There is a very obvious way for regulators to limit the incentives of banks’ managers for excessive risk taking: have a say on the composition (not the level) of their compensation packages. What I have in mind is not a complex and intrusive scheme, but simply a new regulatory instrument that would measure the risk-adjusted performance of banks and limit the distribution of bonuses to managers if this indicator falls below some threshold. Such risk-adjusted measures of
performance are already used by banks to remunerate their traders. It would be natural for regulators to use a similar tool. Bebchuk and Spamann propose to allow supervisors to increase capital requirements if they consider that the compensation package of managers does not take sufficiently into account the risk taken by these managers. I propose to go further and allow the supervisors to cut the bonuses if the risk-adjusted performance of the bank is insufficient. Of course this is intrusive, but not more than restricting the distribution of dividends to shareholders if the bank is insufficiently capitalized, as in the FDIC Improvement Act passed by the U.S. Congress after the Savings and Loans debacle. My proposal would also generate a publically available signal on the risk-adjusted performance of the bank. This signal could be potentially useful to the shareholders themselves, but more importantly it would limit the discretion of supervisors (contrarily to the proposal by Bebchuk and Spamann, who rely on supervisors’ judgement to decide whether or not the managers’ compensation package is “reasonable”) because these supervisors would be forced to intervene when this signal falls below a predetermined threshold.

This would limit regulatory forbearance and guarantee the independence of supervisors against pressure by governments and business lobbies. Of course this new regulatory signal of risk-adjusted performance would be inevitably imperfect and would be gamed by banks, like any other regulation. But the incentives of managers to spend resources in regulatory arbitrage would be way less important than in the present situation where capital requirements are the only instrument available. Take leverage for example: In the absence of frictions, the Modigliani-Miller theorem tells us that, even if plain return on equity is magnified by leverage, this is not true anymore for risk-adjusted return on equity, which is just equal to risk-adjusted return on assets, so that there is no reason to increase leverage if performance is correctly risk adjusted. Of course there are frictions in the real world, so that the Modigliani-Miller theorem does not hold and bankers will still want to leverage even if the measure of their performance is adjusted for risk. However, these incentives would be much less pronounced than in the present situation where regulators have only one, very limited, instrument at their disposal, namely capital regulations.
3. Conclusion

Let me conclude by briefly rephrasing the two ideas I have put forward for improving the control of financial stability by central banks. First, it would be important to give central banks the explicit mandate of guaranteeing the integrity of some designated parts of the financial system such as interbank markets, large value payment systems and some derivatives markets. This mandate would be accompanied by special supervisory powers on “officially recognized financial institutions” that would play a similar role as that of clearing members in private clearing houses. So, instead of having to deal with self-promoted “systemically important institutions” that could exert some form of pressure on public authorities, the central bank would have the power to revoke this status of “officially recognized financial institutions” before they are actually able to threaten the stability of the whole system.

My second proposal would be to give the central bank (and also to micro-prudential supervisors of deposit-taking institutions) a new regulatory instrument, based on some risk-adjusted measure of the annual performance of the regulated institution. The idea would be to give the supervisor the power to suspend the distribution of bonuses to the managers if this indicator falls below some predetermined threshold. This new indicator would provide a publicly observable signal on the performance of the bank and would limit the discretion of supervisors. More importantly, this new regulation would constitute a much more direct way of curbing the incentives for excessive risk taking by banks’ managers. It would also be a useful complement to (suitably recalibrated) capital requirements, together with liquidity requirements and capital insurance instruments. This would allow supervisors to use a whole battery of simple regulatory instruments instead of a unique and complex capital requirement that has opened the door to so many cases of forbearance and manipulation.