GENERAL DISCUSSION

Panel on Policy Reforms after the Crisis

Chair: Barry Eichengreen

Mr. Eichengreen: So we have heard three interesting presentations. Mr. Kim and Mr. Miyao focused heavily on macroprudential issues. Norman Chan focused heavily on Europe and the United States, although the points he made are obviously not without implications for Asia. Let's open the discussion to the floor.

Mr. Svensson: As background to these presentations, I would like to make a general point on assessing the risks to financial stability and corresponding risks to an economy. In particular, we should not expect to find a single or just a few magic indicators that can tell us whether things are going wrong or not. We need to look for a kind of unsustainability syndrome which involves looking at a lot of indicators and a lot of details. It's not enough to look just at figures on debt-to-income, house price growth, or credit growth. One has to look at the reasons behind these phenomena. Credit growth may be good or bad, depending on what is on the other side of the balance sheet. Do we see good, productive assets growing too, with reasonable prices and good returns, or do we see credit used for consumption? One needs to look at the whole picture, with attention to the details. So one needs to look at balance sheets rather than relations to GDP and disposal income as well as leverage assets to equity. Looking at noncore liabilities for financial firms, as suggested in the Mishkin et al. paper is a very good idea, but we also need to look at liquidity mismatch and maturity mismatch.

There are many questions that need to be asked. Is there a construction boom or not? Do we see speculative behavior? Do we see households buying second and third homes? Do we see households buying homes to rent or buying to occupy? Are credit standards high and stable or deteriorating? Do households assume high appreciation in their housing cost calculations? Can they finance their houses if prices do not appreciate? Do we see increased risk-taking or not? And do we know initially whether risk-taking is optimal? It could be that risk-taking is too low, so a bit of high risk-taking is good. Or it could be that risk-taking initially is too high, so more risk-taking is bad. Is there a mortgage-financed

consumption boom or not? Do we see mortgage equity withdrawal? I think the saving ratio is another important indicator. If you have a low, even negative, savings indicator, things do not look sustainable. But if you have a high savings ratio, things look much better. In general, do we see an overheated economy? Do we see inflation? Do we see a loss of competitiveness? Do we see an increase in government budget deficits or in the current account deficit?

When we look back at the crises we have observed—Sweden before the 1990s crisis, Greece, Ireland, Portugal, Spain, the United States before Lehman, Europe before the current sovereign debt crisis—has there ever been a crisis in a country where only one or two of these indicators I mentioned flash red? If only one or two are red and all the others are green, things probably look pretty good. If several of them flash red, then we should be worried. But I don't think we should ever look at a single or just a few indicators. Credit-to-GDP growth is not enough. It depends on what is on the asset side.

Mr. Eichengreen: That is also the lesson that comes out, for example, from earlier empirical literature on currency crises. There isn't a single variable; for that matter, there isn't a stable relationship between a set of variables and crisis incidents. There really doesn't seem to be a substitute for the judgmental process that Lars is describing.

Mr. Truman: We have institutions, global financial stability boards, and the International Monetary Fund all busy working with their early warning systems. I agree with using multiple indicators, as Lars advocated. There are no simple rules to be followed, which gets one into the world of discretionary policy and leads those who are concerned about moral hazard to be even more concerned.

I have two questions. One is a specific question about Mr. Kim's presentation and what I call the "global swap network" version of the global financial safety net proposal. I advocate this and have written on it several times. I think there are two issues. One is the puzzle about the behavior of Korea during the last crisis. Korea was reluctant to use much of its reserves. This bears on the whole issue of what the reserves are, and what is the appropriate level of reserves. I'd like your comments on a three-key system, as I suggested in my paper. One key would be that the Fund would say there is a global crisis and the central bank would pay attention to the ramifications of that crisis. The second key is that the central banks would agree to the terms recommended by Basel. The third key would have a prearranged set of swap agreements with countries desiring funds applying and others agreeing under set conditions. Having this three-key system would leave discretion ultimately with the central bank that

applied and the central bank that said yes to the swap. Coming back to my question about reserves, the issue is that the central bank on the other side of lending to the Bank of Korea would also take on a certain amount of credit risk and a certain amount of criticism from its own domestic political forces. Watching how much the Federal Reserve lent out during the crisis in 2008 and 2009, one might perceive that those swap line drawings were perceived as being unconditional, but that was not always the case. Indeed, historically for the Federal Reserve, many swap drawings carried conditions such as, if you couldn't pay it off in three to six months, you would go to the IMF to pay it off or use your reserves. These kinds of conditions were not made public and were like phantom operations, but that may or may not be the case these days. So I'd be interested in your reaction to that sort of framework from your perspective and maybe from others like Norman and Anil.

My second question is more general about macroprudential tools. It seems to me that we're still worrying about whether we should turn the screws on credit more. And if you think about just the U.S. economy, you might think the problem is the reverse, that credit growth is slow, including to the housing market, and the screws may be too tight. That raises the general question about these macroprudential tools in the aftermath of the crisis. One could argue that this set of tools should be able to be used both ways, to turn the dial up or down. But again, looking at the current environment in the United States as an example, turning the dial down in an effort to stimulate the economy more would open policymakers to political risk and criticism from some quarters. If the president of the Federal Reserve Bank of San Francisco, with the approval of the Federal Reserve Board, said we're going to order banks to raise their loan-to-value ratios, I think he might be criticized by some people, and certainly by the press. On the other hand, in Asia my impression is that you can more easily turn the dial either way. Do you think there's an asymmetry in using macroprudential tools, and, if so, how have you gotten around that asymmetry?

Mr. Eichengreen: So let me turn back to the panelists quickly for responses, starting with Dr. Kim, if you want to respond on Korea's reserves or other matters.

Mr. Kim: In 2008, the Bank of Korea had a fear of losing its reserves, a feeling that has continued even till now. For example, in September 2011 Korea's reserves amounted to around $310 billion. At the time we had lost maybe $5 or $6 billion in reserves. All the newspapers asked whether the $300 billion level would be breached or not. So we joked to each other, that no matter how much reserves you have, the best thing is to say that your usable reserves end in

99 because there's always fear of losing below to the next hundred. But in 2008, the market's main concern was the *speed* at which the reserves were falling. At the time, the BOK initially intervened in the market. It later tried to use its limited resources more wisely. So it fed the reserves into the interbank markets through auctions to support the country's banks. It's very difficult to determine the optimal level of reserves. Olivier Jean was writing a paper on this issue, but he gave up because he said the cost benefit analysis of the optimal reserve model can generate any level of reserves. It's really hard to pin down even the optimal level of net foreign assets of a country. So, swap arrangements can be useful because they can provide contingent credit. Korea's reserve levels may be too high. China's reserves may be too high as well. But that may be good for Asia today. When we talk about the liquidity coverage ratio, the question is how much liquid assets are appropriate to hold relative to short-term and other volatile liabilities. In Korea, private domestic banks have very little in liquid assets, while they have large liabilities on their balance sheets. So whenever there is any dollar shortage in the market, they come to the Bank of Korea to draw down their foreign reserves. So the individual bank's risk quickly turns into a sovereign risk for Korea. To avoid that kind of problem, I think a swap arrangement with advanced economies is particularly useful, even if it's not a big amount. In 2009, the swap line with the Federal Reserve was only $30 billion. At the time, Korea still had reserves of over $200 billion. But this $30 billion swap had a big signaling impact on the market. As for IMF lending, there's a lot of stigma from the Asian crisis. So for Korea, borrowing from the IMF is relatively less desirable from the perspective of policymakers. I don't know exactly what the proposed conditions are for swaps, but when engaging in swaps with emerging markets, the Fed could monitor emerging market central banks to ensure they meet certain standards, such as maintaining stable inflation.

Mr. Miyao: Let me briefly respond to Lars's comment. I agree that we need to look at the whole picture rather than looking at a single indicator. That includes not only micro indicators but also several disaggregated sector-by-sector assessments of risk-taking. For instance, in the corporate sector we look at the ratio of corporate investment to operating profits. For households, we look at the ratio of household investment to disposable income, multiplied by the size of household spending. For banks, we look at the ratio of outstanding loans to operating profits.

Mr. Chan: Lars. I think I agree with you, there are a whole host of indicators we need to look at. But I want to highlight a root cause or so-called original sin behind financial crises. You emphasized the need to distinguish between good

vs. bad credit growth. On the micro level, you may be able to make this distinction. But on a sectoral level, I doubt it. Look at the indebtedness of governments in Europe. Before the eruption of the recent European sovereign debt crisis, you had almost 20 years of steady growth in government indebtedness in the region. But the market gave the impression—I think, the illusion—that this growth in indebtedness was okay, until it was shown that it's not okay. All these ratios you talk about, with healthy or not healthy indicators flashing green or flashing red, are irrelevant because the comparison is from one decade, two decades, three decades ago.

It's important to recognize that something has fundamentally changed that the micro indicators don't necessarily reveal. Something is instinctively wrong with the way these governments conducted themselves. If you had argued with me on this point five years ago, I would not have been able to convince you because you would say that the market's providing liquidity funding. The interest cost was low. Italy was borrowing at 3 to 3½ percent. What's the big deal? Now borrowing costs are much higher. So the market is now demanding drastic measures from European governments going forward. When you're in the middle of a boom, you may have this intoxicating feeling that everything's rosy, like during the housing bubble in the United States, although to me all the indicators flashed red. But U.S. observers said, this time it's different, there are reasons why prices can only go up and not down. That is why the researchers have been trying to find some kind of threshold beyond which the probability of a crisis rises significantly. Maybe the danger zone is 60 or 80 percent of debt to GDP for government debt, we don't really know. When Argentina gave up its currency board, its debt ratio was 60 percent of GDP. But when the peso devalued, Mexico's debt ratio was much higher.

The lesson to be learned is that you have to be very prudent and return to the core values that our fathers and grandfathers treasured. Don't spend beyond your means. But this lesson is not something which is actually taken very seriously.

Regarding the question on macroprudential tools, it's very difficult to apply them because when you really need to start to tighten policy, it's like taking the punch bowl away when everything is good and everybody is having fun. And you have to convince the market that it is reaching a stage where you have to do something to slow down the cycle to reduce future risk. If the cycle continues to swing upwards, you can't just tighten once, you may have to continue tightening. Then you may face criticism for not having effective measures or for acting too early. When the cycle turns, it is even more difficult because, even if it is following the cycle trend, that's precisely the time when banks become

reluctant to lend to anyone with a higher loan to valuation ratio. If you loosen policy, then you're allowing banks to take more risk at the precise time when they are unwilling to do so. In practice, you have to think in terms of acting symmetrically: during the up-cycle, you have to tighten policy, and during the down-cycle, you must have the courage and discretion to be able to loosen it.

Mr. Eichengreen: Thank you. We now have Mark Spiegel, Pierre-Olivier Gourinchas, Andrew Crockett, and Muhammad Al-Jasser.

Mr. Spiegel: Thanks. My question actually follows directly from Chief Executive Chan's statement. I'd like to offer a revision to the first of the policy lessons you put on the board. It would be slightly more neutral to change the first term to avoid excessive leverage rather than excessive borrowing. The way you put it presumes that no mistakes were made on the lending side. At least on this side of the Pacific, the jury's still out on that, and I believe there's enough blame to go around on both sides. As Chairman Bernanke's statement suggested, the savings glut and other factors might have led to easy credit conditions and probably played a role in the buildup of imbalances prior to the crisis.

Mr. He: He talked about some reasons why Asian countries might have been building up their reserves for precautionary reasons. If that's the case, might there still be spillovers on the lending side that need to be considered when making policies? Because the world economy got into a lot of trouble because of the imbalances that came out of what may well have been precautionary savings motives.

Mr. Gourinchas: Thank you. This was a very interesting panel. I want to come back to something from Norman Chan's presentation and the comment by Lars. I agree that there is a need for a really fine-grained analysis on a case-by-case approach when we want to look at potential risks. But my sense from the recent literature is that we might not have to use such a large number of variables as has been suggested to pick up some of the vulnerabilities. I refer to some of my own work on this topic with Maury Obstfeld, which coincides with other papers by Jeff Frankel, and by Òscar Jordà, Alan Taylor, and Moritz Schularick. These all indicate that credit variables such as high ratios of credit to GDP seem to be very strongly associated with vulnerability. Real exchange rate appreciation and the output gap, especially in the upswing phase of a boom, also seem to be associated with increased vulnerability. In the context of the discussion we're having, it is interesting that reserves play a very strong role in moderating some of these risks. And what we found is that the effect of using reserves was almost as strong with the opposite sign as credit to GDP. So to the extent

that you're adding to reserves, you might be able to negate some of the impact of your credit growth. These few variables have been shown to be fairly accurate indicators of crises.

My second point is that central bank swap lines and IMF liquidity facilities can function identically, if the prequalifications designed for central bank swap lines are the same prequalifications that the IMF imposes for access to its precautionary credit line. My sense is that central banks are reluctant to make the swap lines permanent for a variety of reasons. The IMF, on the other hand, is very keen to bring countries back in and provide contingent liquidity services. However, some countries want to go to the IMF but are afraid of the stigma.

Mr. Crockett: It's hard in principle to disagree with Lars when he says you should take everything into account. But that's a prescription for inaction because you don't get a neat numeration of red or green flashing. And it's always easy to find rational expectations for why you don't need to worry. If you think back to the period before the current crisis—admittedly with the benefit of hindsight—a lot of people pointed to the danger signals. But many at the time, particularly in official circles, found no significant reason to worry, especially about the situation in 2006 and early 2007. So I agree with Pierre-Olivier, that a consensus is growing around a relatively small number of variables. And if you've got those variables with a significant amount of agreement, then it's much easier to take action than if you take everything into account and come to a judgment, apart from the moral hazard problem that Ted raises. Now, on Ted's question of how to use countercyclical policy in reverse. I agree with Norman that it's very difficult to push on a string. I suppose you could find some comfort had you been successful in the initial use of countercyclical policy. If you had prevented the financial imbalances from emerging so strongly in the first place, you would be unlikely to have a financially driven recession. And therefore, the banks might be more willing to change gears and move in the opposite direction once the restraints were relaxed. But apart from simply trying to predict and offset imbalances, one of the most important things is to make sure that the banking system, or financial system more generally, is resilient when imbalances blow up in the form of crises. Because we're never going to prevent crises from coming. We're never going to prevent procyclical conditions in the financial industry. But we can ensure that when those crises come, the system itself is resilient enough to withstand them.

Mr. Eichengreen: Thank you. So, Muhammad Al-Jasser, Joshua Aizenman, Jim Wilcox, and then I think we'll have to close.

Mr. Al-Jasser: Thank you, Barry. Thank you all for this wonderful seminar and for all the papers that have shed light on specific aspects that challenge us as policymakers. Thinking about Asia's role in the post-crisis global economy, the challenge now is for Asia, particularly China, to avoid a hard landing. We need to do everything we can to ensure that mistakes are not repeated. In my experience, all crises—be it the debt crisis of the early 1980s, the Asian 1996–97 crisis, or the present crisis—have resulted from a combination of managerial imprudence on the part of fiscal authorities and the financial managers of financial corporations, as well as supervisory imprudence on the part of the financial supervisorial authorities. This imprudence leads to the feeling that problems can be dealt with later on or by another government, allowing the excessive buildup of leverage or sovereign debt. And then something has to give. Clearly, managers and supervisors abrogated their responsibilities during the various crises that we have talked about. The books of Kindleberger and of Reinhart and Rogoff that were mentioned today are full of examples of that. As a supervisor myself, I feel that many supervisors have abrogated their responsibilities at critical periods of time, which allowed those bubbles to build up. We can talk of macroprudential tools, but the essence of supervision and management is really a gut feeling. That's why I'm not very comfortable separating a central bank's supervisory role from its lender of last resort role. How could you ask a central bank to offer a bailout without having its finger on the pulse of the financial sector with supervision on a daily basis. This knowledge is crucial when making and exercising managerial and supervisory prudence that necessitates taking a countercyclical approach to fiscal policy, monetary policy, and bank supervision. We have practiced this at the Saudi Arabian Monetary Agency, which is the only reason we avoided all these crises. But this is only because we did not forget the lessons about the consequences of fiscal and financial imprudence from our own earlier experience.

So my question is, considering the frequency and severity of financial crises, is creative destruction necessary? Do these crises have to happen for us to learn and relearn all of these lessons? And what should we do, according to history and the literature?

Mr. Aizenman: Let me follow-up on the interesting comments from Norman Chan regarding the fiscal ratios of debt over GDP. I believe that most countries observe an asymmetric tendency in changing taxes. It's quite easy to reduce taxes. It's much harder to increase taxes. Now, this suggests to me that the key ratio is not debt to GDP, but debt relative to a country's tax capacity. So an

increase of debt relative to tax capacity—that is, the average tax collection over GDP for the past five years—is a good warning indicator of a crisis.

Mr. Wilcox: Thank you, Barry. I agree that we shouldn't bother to push on a string. But if I can start mixing metaphors, we could actually push on a stick, or better yet, a carrot. When it comes to supervisory leniency, this might in fact be an optimal time for bank regulators in Europe, and maybe in a lot of other countries all over the world, to ease up on capital rules. Supervisors often act as if they forget why, in their own personal automobiles, they have a spare tire. I presume the reason is because sometimes if you suffer a loss, say a punctured tire on a busy highway, you actually take the spare tire out of your trunk and use it. That is presumably why we have bank capital. It is there to absorb losses. Adhering to a 9 percent capital rule in the midst of this kind of a financial tornado is unnecessarily damaging to the macroeconomy, both in Europe and in other countries around the world. But having been burned once, supervisors don't want to be burned again, so there is some tendency to want to enforce these high capital rules at this time. Ted mentioned that some of us have been around long enough that we've heard these discussions before, and have seen some of these empirical results. I'm reminded of what St. Augustine said in the fourth century: Lord, grant me chastity, but not yet. And that's how I feel about these capital rules. Ultimately we are going to need higher capital rules than we've had in the past. But not right now.

Mr. Eichengreen: Thank you. We are running over, but there is time for a 30-second response by any of the panelists who are so inclined.

Mr. Kim: Responding to the last comment. There was a lot of discussion at meetings I've been involved in about not only capital ratios, but also the liquidity coverage ratio. The question was whether this ratio should be enforced at all times, or should it be lowered during a crisis. It's puzzling because we can think about the IMF lending facilities as a kind of multilateral version of bilateral swap agreements. But it's difficult to understand why many Asian countries are reluctant to borrow from the IMF, which doesn't have much conditionality. Instead, they want to have more swap lines with the Fed or the European Central Bank or even the Bank of Japan. It's a very good question, but I don't have an answer.

Mr. Miyao: Let me briefly comment on the earlier discussion of the U.K. experience and the separation of the Financial Services Authority and the central bank, in terms of macroprudential activities. In Japan's case, the regulatory

body is the Financial Services Agency, and the Bank of Japan doesn't have macroprudential tools. But one unique feature is that the BOJ also conducts microprudential activities such as onsite examinations and offsite monitoring of financial institutions. This is on a contractual basis, because they are not legally authorized. But we share this microprudential information with the FSA. And we try to collaborate with each other to have better assessments.

Mr. Chan: I can understand the logic that it's a hard time to require banks to raise capital by June of 2012. But when you have countercyclical measures, you have to think in a symmetric manner. That means, when it is a boom time, you tighten. And that will allow you room to loosen later. If you start from a very weak position, there's not much head room for you to maneuver. Actually, the European Banking Authority (EBA) is under tremendous pressure to raise capital requirements because the market's telling everybody that unless the banks have a high, credible capital level within a short period of time, there'll be problems. This is precisely what they're doing. But it's kind of becoming a chicken-and-egg problem because when you decide on 9 percent, it's very hard to go to the private markets for capital for recapitalization. And there's a lot of reluctance to go to governments for capital. Therefore, this forms a kind of negative feedback loop—when people worry about the banks, they worry about the sovereign. When they're worried about the sovereign, they worry about the banks, and the problem deteriorates. It's like a run on the bank. But I agree with you. When you use countercyclical measures, you have to learn to loosen policy in the down-cycle. Unfortunately, you didn't start with a strong position of tightening during the boom times. And that's the dilemma we're facing.