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BANKS AND CAPITAL FLOWS:  
POLICY CHALLENGES AND REGULATORY RESPONSES

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## P R O C E E D I N G S

MR. PRASAD: Good afternoon, and welcome to the launch of the second report of the Committee on International Economic Policy and Reform. This one is titled "Banks and Cross-border Capital Flows: Policy Challenges and Regulatory Responses." It's literally hot off the press as we got the report just a couple of hours ago, so all of you in this room are among the distinguished first lot worldwide to get it. So thank you very much for being with us.

I'm going to start by telling you a little bit about this Committee. It was thought of by Barry Eichengreen and Raghuram Rajan, names I'm sure all of you are familiar with. It came out of a conversation they had where they were talking about a number of policy issues and where lots of people seemed to have lots of things to say. But much of it was not grounded in any analytical framework. So Barry and Raghuram decided that perhaps it will be nice to bring together a group of academics, including people who had been in the policy world before and also had some private sector experience, and start trying to think about some of these issues in a more analytical framework. And then they brought me on to help coordinate this group and we then put together a group, as you can see, of distinguished and very distinguished people.

Our first report last year looked at monetary policy issues, and it seemed logical to follow up from that by looking at cross-border capital flows. And we thought we'd have special value added looking at an area that has received a lot of attention recently in Europe in particular, but elsewhere, that is cross-border banking. So the idea in this report again is not necessarily to be revolutionary in terms of what we put on the table, but to generate a framework that we can use to think about different policy recommendations and the costs and benefits thereof.

So today we have, again, a very distinguished panel to discuss these issues. Hyun Shin, who is a professor at Princeton University, is actually the lead author of this year's report, so we're very happy to have him with us. And like the others on the panel, Hyun is not only a very well-known academic; he's also somebody who has been involved in the policy having been an advisor to the president of South Korea when South Korea had the chairmanship of the G-20. So welcome him.

And then to his left is Jose de Gregorio, who is now a professor at the University of Chile, but in fact, used to be the head of the Chilean Central Bank in the years 2007 to 2011, and before that had a triple portfolio where he was heading three different ministries at the same time. And in fact, Jose and I go back a long way. He and I started at the International Monetary Fund a long, long time ago on practically the same day. And Jose, of course, went on to great things.

Jean Pisani-Ferry is also one of the committee members, as are him and Jose. And Jean is the head of one of the world's leading think tanks across the pond, Bruegel, and he's also professor at the University of Paris. And like many of the others on this committee, he also has a lot of policy experience having advised the French government in various capacities.

And finally, we have our very own Don Kohn. We are always very proud of showing off Don every chance that we have. Don, of course, was the vice chair of the Federal Reserve and has been in the thick of thinking about these issues -- monetary policy, financial regulation, and so forth. So Don will be our external panelist. The rest of us are members of the panel and we are counting on Don to give us a hard time.

But let's start with Hyun, who will tell us about the overall conclusions of the report.

MR. SHIN: Thank you, Eswar. It's a great pleasure to be here, and it's a double pleasure to have Don Kohn as our discussant. He always keeps us on the straight and narrow.

It was great fun writing this report. We learned a lot. As you can see from the cover, it's a very large and diverse group of authors, and so whatever conclusion you see on the page is the result of many hours of debate and we certainly learned a lot from each other.

I suppose one starting point of the report was to address the apparent gap that we tend to have between discussions having to do with financial regulation and financial stability on the one hand, versus international capital flows on the other. We tend to apply very different standards to the two. I think it's not so controversial to say that in the field of financial regulation we do need to intervene in the markets or in the behavior of certain participants in the markets in order to secure a better outcome. It's far more controversial to say that in the field of international capital flows people tend to focus very much more on the current account, and there is a tremendous stigma attached to macroprudential policies. And one of the starting points of our report was to give a more analytical perspective on why the similarities may be deeper than meets the eye.

So one of the things that we discuss in the report and the charges up there is the difference between gross and net capital flows. So this chart that you see is the various categories of capital inflows and outflows. The outward pointing bars are the capital inflows into the U.S. The downward pointing bars are the capital outflows from the U.S. And the gray cell is the capital inflow from the official sector. In other words, the purchase of treasuries by China and Japan and other counterpart surplus countries. That gray bar is the one that tends to capture most of the attention in debates about capital

flows, because that's the one that corresponds to current account deficits of the U.S. and the accumulation of official U.S. assets by surplus countries. Whereas, the other bars, as you can see, are larger than that in absolute terms, much larger. And these are the private sector flows. And in particular you can see that most of those flows are things that you would associate with the banking sector. So, for instance, the green bars pointing downward are the capital outflows from the U.S. through the banking sector, and then we show in the report that that funding comes back to the U.S. through the red bars into the purchase of non-Treasury securities. And it turns out that these bars are attributable to the activities of global banks, and in particular European global banks, who raise dollar funding in the U.S. and then bring it back to buy private label mortgage-backed securities and other securities. And arguably, they have had a much bigger impact on financial conditions in the U.S. than just the purchase of treasuries or perhaps equally, if not more so. But because these countries have a roughly balanced current account, because the negative bars council out with the positive bars. They rarely register in debates about the current account. And it seemed that this was a little bit of a -- actually, more than a bit of an anomaly in the discussions about financial stability.

And if we look at the -- some of the money, of course, comes back. Well, most of the money comes back. If we look at the rest of the money, it actually flows to all corners of the world, and these are capital flows into the various countries listed on the right. These are claims of the BIS-reporting banks, the various global banks. And you see this synchronized info into these countries in the years before Lehman. This very pronounced synchronized capital inflows.

Now, how do we deal with this? If we push the analogy with financial regulation, the way we should address this is to have global financial regulation, global

accord. And they could find out through regulation. And also global accord naked monetary policy in order to mitigate some of the incentives. The committee starting point is to have a more realistic perspective and set realistic goals, achievable goals, and find the best ways of achieving those achievable goals, rather than to set unrealistic and then despair when those targets are not met. And two, concrete examples that we discussed, the negotiations for Basel III, which also always has this tension between finding optimal global rules but also being something of a trade negotiation, where each party goes in the room as patrons of their own banking interests.

And the second example we discuss is monetary policy. And global monetary policy is even further away from the idea of global coordination than is global financial regulation. And given that, we argue for what's called a second best approach," which is to say let's treat these distortions, if you like, from the first best, this idea as givens, and think about the best policy responses in response to those existing distortions. And the report goes into fairly -- into some detail of the various macroprudential policies that one can use in this context, and here we draw on the practical experiences as well.

So let me pass onto Jose.

MR. DE GREGORIO: Thank you very much. Thanks for the introduction.

It was a great experience to work with such a diverse group of people with such diverse experience and views, but I think that we came up with some ideas that are important from the point of financial stability. So I will make just four points. One on what the report is about, something then on emerging markets, and some policy implications. I will finalize with a couple of comments.

This paper is mostly about gross international capital flows. Hyun Shin, there has been an increase in financial integration around the world. There is a lot of capital; gross capital flows despite net capital flows may be bounded. And we have a long discussion in macro on exchange rates and on the importance of net capital inflows which is the counterpart of the current account, but what we want to emphasize here is that from the point of view from financial stability, it's quite important growth flows. And we have seen, and this is something that in emerging markets has been quite common, the difference in the type of flows and the (inaudible @ 0:11:06) that they bring about if the (inaudible) flows are much more stable before liquidity flows are much more stable as the prices adjust, so that's a very stable source of foreign funding.

In contrast, cross-border banking flows tend to be more unstable. Many of them are (inaudible @ 0:11:27) run and they exacerbate the business cycle. They exacerbate the business cycle not only because there is a natural improvement in credit worthiness during the boom, in which case you have more lending, but they also (inaudible @ 0:11:38) cycle because you free up some capital. And as we see in this graph that was quite important, it is highly synchronized. It is much more synchronized than we would expect is the synchronization of credit worthiness of our own countries in the world. So this is the effect that credit flows have on exacerbating the business cycle. Despite this, net flows are also important. I don't want to minimize their importance because persistent, and we're discussing the (inaudible @ 0:12:13) persistent, in balances they build up enough stock problems and foreign liabilities that may end up also risking financial stability.

So let me make now some points on cross-border banking and the experience that we have seen in emerging markets. Many of the issues that we start

discussing in this report; you're always reminded when you are old enough to having been alive for the debt crisis. Do you remember this happening? And they said this happened in the '80s; I was a kid. And then you say this happened also in the Asian crisis. And what happened was very high debt, rapid reversals, and currency mismatches where the key component, or one of the key components of the crisis in Latin America and in Asia. Now there are differences. Now there are good fundamentals. I won't discuss much more, but there are much better macropolicies, but this is different. The funding. The funding is much more based in the banking system on core liabilities, broad-based deposits, and much less dependent on short-term funding as it was in the previous debt crisis in Asia and in Latin America.

They think it's quite important, and we show Samaritans (phonetic @ 0:13:35) it's a (inaudible) flexibility makes and induces more (inaudible) in terms of currency mismatches in the banking system because you have not ensured a fixed exchange rate, so flexibility induces some discipline. And the simplest way to show this is just to point out as we said in the report, during the Lehman crisis, in a period of three to six months, in Asia and in Latin America, currencies depreciated about 60 percent in a very short period of time, something that has never happened before except during currency crisis. But in a sound fluctuation of exchange rates we didn't have that before, and that's because the system was much more resilient to exchange rate fluctuations. Therefore, the currency mismatches were much less of a problem.

And now there is also -- it's not just flexibility induces (inaudible) behavior; there is also a (inaudible) regulation. And this is important. It's not just a problem of currency mismatches in the banking system, the most dangerous case, and I think the currency. Banks have been all the history that they know have always been



required to be in terms of currency will match, but it is the mismatch of borrowers. We have seen it in Europe, lending in the nontrade (phonetic @ 0:15:00) for housing in foreign currency. We saw it to corporations in the nontradable sectors in many emerging markets, and there was regulation that in terms of increasing provisions or capital or adding capital charges to lending to nontradable firms in foreign currency makes it, of course, more costly to do it.

There were some tensions during the crisis as some corporations in Korea, Brazil, and Mexico did some derivatives operation that was very costly. Nothing to affect the financial stability, but those are problems that we at least have to look at here in order to protect the financial system from the speculation and the tensions coming from the corporations.

I think we discussed a lot in the report the organizational structure of foreign banks. There are two types of global banks, multinational banks, which are a collection of mostly independent affiliates, and there are international banks where definitely decisions are basically taken at headquarters. In most emerging markets, foreign banks operate subsidiaries, despite in many countries regulation between branches and subsidiaries is the same. It's the same and it's the same as the regulation for local banks, which is also quite important. So we don't have the issue that was very common, the European passport you have in Europe, very different regulation on banks depending on the region. In our case, whether you are a foreign bank, an affiliate, a subsidiary, a branch or a domestic bank, you have basically the same level of capital requirements, the same regulatory requirements. The only difference is in terms of responsibility, and the responsibility in the case at your branch is with the board in the parent bank. And in the case that you are a subsidiary, the responsibility is in the domestic board because you

have to have a board. And of course, the foreign board, the headquarters board, they want to not have the responsibility in a small branch in Chile, so they say, well, let's set it up as a subsidiary.

But that also brings -- and I think it has been quite important and has been the rules on related lending -- there are a lot of rules on related lending and regulation of related lending of corporations and banks, but also across banks and there are caps on deposit, how much you can deposit on the parent bank so you don't become a funding instrument rather than an affiliate. So in the case of Latin America there is one additional thing. That is not very, very well started but is important is that the foreign banks are mostly Spanish, and the Spanish banks have taken an approach of arm's length and that they really have independent -- and with local partners they have independent subsidiaries.

Now, we see even in the case of Latin America, foreign claims to the banking system, most of them are locally funded. So 60 percent of foreign claims in Latin America are locally funded deposits. In the case of Asia, it is somewhat less: it is 40 percent, and Europe it is in between. But I think that this has been an important -- not trouble with the crisis, not trouble with the credit. There was a credit crunch. There was a decline in lending by domestic banks by foreign banks. There was a reduction in foreign claims, but the recovery was also very rapid in Asia and in Latin America, not in Eastern Europe. Which suggests that the collapse in Latin American credit was much related to the increasing (inaudible @ 0:18:46) and also a demand contraction, and when demand came back there was again lending.

Regarding policy implications, Don Kohn will we discussed. There is a need for coordination. We recognize on the board that there is no -- it's not possible to

have monetary policy coordination. It's very difficult to have also regulatory bodies but we have some in terms of setting up rules and coordination, in terms of regulatory rules, what has been doing the FSB and the Basel committee. Also, information sharing, especially for global banking it's quite important to have a good assessment of what's going on with global banks. In terms of macroprudential policies, we realize the difference in macroprudential, which basically rests on capital as a buffer against losses, with macroprudential which the objective is to dampen the procyclicality of the banking system.

We discussed the role of applicators to see whether some financial vulnerability is increasing. Also, the traditional policy tools. So on the liability side, there is (inaudible @ 0:20:01) and this attaches a lot with the capital controls discussion. Capital controls, usually the broad idea has been thought in order to limit net capital flows, in order to limit currency appreciation, here we look more at regulation on a specific type of flow. Korea did it with a capital level on foreign denominated liabilities, non-core liabilities, and more than looking at changing the patterns of net capital flows is to change and to affect the composition and to protect financial stability.

Just one final remark. Regulation, all that we have discussed in this report has cost, and having subsidiaries in terms of international well-integrated banks, of course, because it reduces -- it increases market segmentation. Marginal costs and marginal benefits are not the same across all countries, but this has caused macroprudential. It has also caused (inaudible). They have welfare costs but we think that it is much more important to pay the costs in the boom, to pay the costs in reasonable installments, that you pay most of them in the crisis, which is much more costly.

MR. PRASAD: So thanks, Jose, for giving us a flavor of the recommendations of the report. You didn't touch upon the issue of funding and, Hyun, I know you've worked a lot on the issue of the sources of funding for banks and how that becomes an issue in terms of the vulnerabilities of banks and the role of banks as a transmission channel. Can you talk a little bit about why the funding matters and what the report says about making things more stable on that front?

MR. SHIN: Yes, so we -- part of the report is fairly analytical in that we drill down into the sources of the procyclicality of the banking system. And partly it has to do with the way that the intermediaries manage their balance sheets. So it's when financial conditions are more permissive that they expand. But then there's a feedback effect where that expansion that feeds into credit supply and the credit supply leads to compressed risk premiums and so on. And as intermediaries engage in that type of activity they will tend to resort to more what we call non-core liabilities. So they draw on other sources of funding, especially through the capital markets, through the wholesale capital markets, for example, through the money market funds. And then in the way that the global banks operate there is a centralized portfolio mechanism where funding is obtained where it's cheapest, and that funding is then deployed to where the returns are highest. Therefore, it acts as a transmission mechanism across borders.

And in a way, we see it most clearly in the eurozone where although we have the common currency and as Jean will discuss in more detail shortly, we have a common currency and we have a single market. It's still very much a segmented banking system within the eurozone. There are now proposals for a banking union, but in a way the route that the eurozone has taken really mirrors some of the logic that is in our reports, because if you have a fragmented financial system but then allow this completely

open and free-flowing liability to the banking sector, then that is far from leading to the type of stabilizing flows may actually fuel exactly the procyclical and destabilizing dynamics that actually lead to bubbles and greater instability.

MR. PRASAD: Thanks, Hyun. So since he just arrived from the other side of the Atlantic, Jean, what's up with Europe? Or to be more specific and less blunt, in terms of the specific analytical issues touched upon in the report and the recommendations that we have, where do you think Europe stands and what do you think they should be doing?

MR. PISANO-FERRY: In this report we are referring to Europe in a funny way, as the first best world. There's a second best world and we say we have to admit that we live in a second best world where we can't have global regulation and global coordination, so we have to consider second best options. There is a corner of there were we still consider the first best option. And finally, that's Europe.

The reason for that is that Europe has gone a very long way towards what we would consider first best arrangements. So we have complete freedom of capital flows, and by complete I mean that there is not a single possibility of discriminating by the nationality of the issuer. So, for example, you know, in tax treatment you can't say I'm treating domestic assets, assets you should buy (inaudible @ 0:25:25) differently from assets issued by a partner sovereign. Provided it is the same currencies issued, they should be treated exactly the same way. So you go a very long way towards uniform arrangements in this respect. We have a Brazil Monetary Union, but we still have fragmented banking supervision. And obviously, resolution and (inaudible @ 0:25:52). And somehow we thought that this was sufficient to be fair. Some people realized very on that it was not sufficient. Some people like (inaudible @ 0:26:04)

for example or (inaudible) Falusi (phonetic), the people who were at the origin of the analysis of European monetary integration. But the assumption that we had a single market in banking, perhaps at some point we would move to some form of common supervision, but for the time being it was sufficient and it was enough to ensure this kind of first best properties.

Now, what we have realized in this crisis is that this is inconsistent. With national supervision and resolution and the national fiscal backstop to the banking sector, this creates a vulnerability. And this vulnerability became very, very visible in the last two years or so. With the feedback between banks and sovereigns, the fact that there was a high degree of correlation between the market assessment of the solvency of banks and sovereigns and the fact that all that ended in actually a sudden stop of capital flows. So the view that without a common banking supervision resolution, banking union, we could have full financial integration that was actually demonstrated wrong by the fact that capital stopped entirely flowing from Northern Europe to Southern Europe. So people thought in terms of (inaudible) net terms, like the balance of payment are always going to be financed, the (inaudible) as we call it does not exist in a monetary union at all, but in fact, which we discovered, that even in a monetary union you could have certain stops of capital flows.

So we are having now financial fragmentation. And financial fragmentation is extremely severe. So, you know, you have companies that are exactly the same on two sides of the border. They don't face at all the same financial conditions. So, and you have actually now supervisors even playing the role of telling the banks don't lend cross-border. So you've got to -- you trap the savings within national borders, which results in the fact that the system of Central Banks, the Eurosystem has to step in and

actually finance what the private capital markets do not finance anymore. Finance meaning offset the capital outflows we're seeing from southern Europe. So this is not sustainable. And this was recognized finally in June last summer by the heads of state and government of the (inaudible @ 0:28:58) who suddenly said we've got to do a banking union, which was very surprising because up until then they were saying you've got to tighten the fiscal rules. You've got to have a firewall, but nothing about the systemic character of this crisis. And suddenly, the systemic character of this crisis was recognized and they said we have to go all the way to a banking union. So all the way to the first best solution.

Now, the big question now is will we do it? One step is supervision. Supervision is going to be given to the ECBs. There is going to be a lot of discussion on for whom. Is it going to be for the whole banks or for a subset of the banks? Or is it going to be for all banks but delegated supervision? There are 6,000 banks in the euro area, so the smaller banks are delegated to the national level. But then I think the even bigger question is after supervision do we -- are we going to also have a common resolution regime? Because evidently, if you have a supervisor, you don't have resolution at your level; you have it at the national level. That creates a lot of conflicts of interest and, you know, there is much room -- for example, imagine a supervisor tells a national resolution authority, I'm withdrawing the banking license for this bank because I think it has to be resolved and you've got to pay for it. And the national resolution authority says, no, no, this bank is perfectly solvent; it just needs a little bit of liquidity. That's typically what will happen if you keep resolution at national level and you have supervision at (inaudible @ 0:30:37).

And then there's the question of the fiscal (inaudible) behind because at

the end of the day you can limit the cost of the banking crisis through good or better resolution schemes, but we know from experience the banking crisis can be extremely costly and as long as you don't address the potential fiscal cost of this crisis, you don't remove -- you don't eliminate this feedback loop between bank solvency and sovereign solvency.

So in fact, it's a sort of fiscal union through the back door or enough balance sheet fiscal union if you prefer that is needed. Now, are we going to go the way? That's very much the topic of the discussions we are having now. The commitment is significant. I think, again, it was a very positive surprise. Implementation is key. Let me stop here.

MR. PRASAD: Thank you, Jean. What you refer to as discussion sometimes seems like (inaudible @ 0:31:38). You come back to Europe because I think some of these issues, particularly (inaudible) the context of Europe but also have more general implications. But first, let's hear from Don about his thoughts on the report.

MR. KOHN: All right. Thank you, Eswar. It's a pleasure to have this opportunity to comment on the report. It was a very interesting report. It's a very important topic, the Banking and Cross-border Capital Flows, and I thought the treatment was very interesting. I completely agree with Hyun and the others that we really do need to look at growth flows. Net flows are important and they acknowledged this in the report, so persistence of current account surpluses and current account deficits are a very important aspect of macroeconomic and financial stability, but to understand where the sources of instability are you need to look underneath the hood to see what the imbalances are you have to look at the growth flows going on. So I think that's an extremely useful push in that direction from this report, and I appreciate the focus on



policy options. I recommend it. It's well worth reading. You'll get something out of it. At least I did.

Let me back up a little bit, start my discussion by backing up a little bit and going up to about 30,000 feet here and reminding ourselves of some of the issues involved. It seems to me that globally integrated capital markets with basically free flow of capital between countries, between institutions, is fundamentally a positive development in the global economy. This free flow of capital helps to allocate resources to its most efficient, most productive use, so productivity is higher; it links surplus and deficit agencies getting the surpluses to where they can do the most good, increase production. It enables risk to be diversified and distributed broadly, but so I think it's fundamentally a good thing and we need to work on how to preserve the good aspects, and that's what the report is concentrating on.

When things go wrong, when assets are mispriced, when credit is too easy or too tight, when the private sector gets it wrong in terms of judging what sustainable credit is and sustainable risk spreads are and the public sector doesn't compensate, that enables these free capital flows, enables and facilitates the risks and distortions to build up more and more quickly than they would have if there were barriers, think about U.S. subprime loans. German banks contributed to the buildup of imbalances in the subprime market over here. Think of the euro area debt, both private and sovereign. The cross-border flows within Europe helped to sustain and make worse risks misallocation. And then when the bubble breaks, when people wake up and realize that what they've been supporting is not sustainable, cross-border flows become engines of contagion in that resulting situation.

The financial markets tend to be procyclical in their characteristic.

There's contagion on the way up, and on the downside and the procyclicality of the financial markets is accentuated by the involvement of banks and other levered intermediaries, particularly intermediaries whose liabilities are shorter than their assets that are doing maturity transformation. And when the risks are misperceived, the feedback loops intensify. As Hyun was saying, on the way up profits in these intermediaries are good, capital builds up, they leverage, they maturity mismatch, credit becomes too available, risk spreads become too easy. And then when things reverse, you get runs on the banks, you get deleveraging, and the pain spreads beyond the affected sector. Think of the subprime market, the mortgage market in the United States, the pains spread far beyond the construction sector and the mortgage market, and the engine for a lot of that pain was the tightening of credit generally in the United States. So these banks and levered intermediaries, when they have imbalances, currency imbalances, maturity imbalances, and things begin to implode, they contribute to an adverse feedback loop and intensification on the downside.

Contrast the dotcom boom and bust in the U.S. with the real estate boom and bust. In the dotcom boom there wasn't really -- intermediation and credit wasn't involved and yes, destroyed a lot of wealth when it broke, but you didn't have these knock-on effects. When the real estate market broke, the actual, I think, the destruction of wealth wasn't all that much different than the destruction of wealth in the dotcom boom but you had a lot of knock-on effects because of the involvement of the banks. I think much of the official effort since the crisis has been to mitigate these problems from the procyclicality and the mismatches in the financial sector. So authorities are trying to damp procyclicality via starting macroprudential regimes. They're building capital and liquidity buffers, building resilience via Basel III. They want to make sure creditors know

that they are at risk by having resolution regimes which put creditors at risk and incent private lenders to pay much more attention to what the intermediaries are doing. They want to simplify and make more transparent interconnections between institutions, for example, by forcing a lot of OTC derivatives through central clearing parties, and they're trying to do this in a coordinated and cooperative way, as coordinated and cooperative as possible via the Financial Stability Board, via the BIS, via the IMF and others. That cooperation and coordination is absolutely necessary. The nature of global capital flows means that regulatory arbitrage is quite possible. So if the U.S. or a particular set of authorities, particular regime tries to tighten up, if no one else does it, it's not going to be very successful. And likewise, if some authorities don't tighten enough, if they don't make their banking sectors as resilient as they need to be, when those sectors get in trouble, global capital flows will spread that trouble around. So cooperation and coordination is absolutely necessary here with a view to preserving and encouraging as free a flow of capital as possible while preserving financial stability.

The report asks: how can we do this better? What steps can we take to accomplish this objective? My reading of the report was that for the most part, it endorsed the present direction of official efforts. There wasn't any, as Prasad said at the beginning, there wasn't anything revolutionary here, but it did want to emphasize some points more than others. Basically, it asks for more and better in a number of dimensions, including global coordination of regulation and macroprudential policies, developing those more thoroughly, and I certainly, completely agree with those recommendations. And it warns that we need, in making the regulatory changes, in trying to make the system safer, we need to take account of the distortions, rigidities, externalities as we're designing these systems so those distortions, rigidities, externalities

inherent in the financial system may require the regulators to put other offsetting distortions into the financial regulation, the so-called second best approach. You can't take a straight-line to freer capital flows. The safeguards themselves may need to distort market signals in order to offset other distortions. And I think this has been part of official thinking for a long time. Just thinking about regulation of financial institutions themselves has often been justified because of the moral hazard inherent in having safety nets for banks. Lenders of last resort and the Central Bank, deposition insurance, and whatnot. So offsetting that moral hazard. So I think governments understand the need to offset some distortions with other distortions. It's always been part of the thing.

Let me make just a few comments to get the discussion started. I actually didn't find that useful, partly because I think I understand that governments understand these distortions. I didn't find the first best-second best contrast all that useful. The first best thing seemed a little bit more like strawman. As I noted, no one thinks they're operating in a first best world without the need for government intervention. It's all about the shape of the interventions and distortions. The authors recognize the need to be very careful about fighting distortion with distortion. You need to be careful you're ending up in a better place. And they worry, and I think I just want to underline this, they worry appropriate that a second best kind of reasoning -- that is we need to intervene in the market to offset this distortion -- can end up being a rationale for protecting private sector interests that shouldn't be protected. I think the distortions need to be minimal in order to accomplish the objectives of building resilience and dampening cycles. The authorities need to be ready to change their regulations when they have to and not let agents who have rents -- seeking rents and have a vested interest in the current distortions -- prevent them from making the changes. I worry about building

constituencies for regulation and protection when the regulations are in place even after they outlive their usefulness. I think we need to be very careful how we implement it. We need to respect without worshipping the market, but we also need to be humble about our own knowledge and be ready to admit that things need to change.

A third point I thought on the report was the report uses the eurozone, as Jean was talking, as kind of an illustration of first best and getting the first best. And the implication, at least as I read it, the report was if we can get to the banking union and the fiscal union, this will be a real test of first best requirements.

I'm a little wary of that. I think the problems in Europe go beyond the need -- the banking union and the fiscal union are necessary but not sufficient conditions for addressing the problems in Europe. Even if there had been closer banking union, closer fiscal union, I think at some point problems would have built up there. The market misperceptions of risk would have still occurred as they did in the U.S. in the subprime market and enabled distortions to build up in Greece and Ireland and other places that have basically have a party with the flows they were getting and become even more uncompetitive and reliant on capital inflows. I think the basic problem in Europe, the fundamental problem in Europe, is putting together very disparate economies, cultures, different rules governing labor and product markets resulting in very different costs and competitiveness even more disparate than the regions of the United States. And not only are the costs and competitiveness more disparate than the regions of the United States, but there are fewer ways for adjusting competitiveness once you've fixed the exchanges rates. So there's less labor mobility and more decentralized fiscal system for transfers in Europe. So I think even a banking union, a fiscal union, wouldn't have fixed this very basic problem of how do you adjust changing competitiveness in countries when there

aren't exchange rates, and the product and capital market or the product and labor markets aren't integrated.

A third point the authors make is that they are concerned about that the efforts on international cooperation are lagging and flagging the efforts to, for more regulator cooperation, are flagging and turning into what they call a trade negotiation; that is one country maneuvering at the expense of the other country. And I think there's some truth to that, but I also like the trade negotiation metaphor because trade negotiations occur in the context of trying to get to a better place, which is freer trade over time. And I think the fighting you see between various groups in the FSB and the Basel Committee is about fighting within a broader effort to make the system safer. And while it's not happening as fast as we all would like and maybe rules are being relaxed more than we would like in the process, or at least not toughed as much as we would like in the process, I think the process is still under way. They're still moving in the right direction. It would be nice if it were faster, stronger, higher, but there's lot of progress being made and there's a lot of impetus for completing. I like the FSB's move towards peer reviews to see that the constituent entities in the global market are actually doing what they say they were doing to raise standard.

I agree finally on macroprudential regulation. I agree we need to implement a strong macroprudential regime. This was in some sense the missing tool that authorities had leading up to the crisis. People were looking at individual institutions, and to some extent looking at systems but not looking at financial systems in an integrated way, looking for the buildup of instabilities across the system. And even where they were, lots of central banks are issuing financial stability reports. The people issuing the reports didn't have the tools to do anything about it. And that's changed. And I think

in a very, very positive way.

Now, the report notes, talks a little bit about tools, and notes that a lot of the macroprudential regulation talks about capital and countercyclical capital, and I think that's an important part. I think the countercyclical capital or capital regulation has some very important macroprudential affects. Raising capital does increase the costs of funds in a non-Modigliani-Miller world, and that will affect asset growth in the United Kingdom, so it's not just about the source of funds; it affects what you do with the funds. In the United Kingdom where I'm on the Financial Policy Committee, we've asked the parliament for the ability, and the government has agreed, to adjust not only the total capital of the banks but the sectoral capital as well, so that if we see problems developing in the residential or commercial real estate markets, for example, we can raise the risk weights or the capital required for that. In addition, we've asked for the authority once it's implemented on the global level, to move the leverage ratio in a countercyclical way. So there's a lot of stuff we've done on the capital side, but I think the capital side will have a lot of effects throughout the bank balance sheets.

In addition, as Hyun pointed out in his discussion, the liability side of the balance sheet is very, very important and the dependence on whole funds, particularly short-term wholesale funds. Basel III is moving towards a liquidity requirement. It's taking a while and it's subject to a lot of discussion and concern by some of the constituent countries, but it is moving in that direction. And this is the first time that there will be internationally-agreed liquidity requirements which will deal, to some extent, with the issues that Hyun was referring to. So I think this is a very important step, and the authorities are quite aware of those issues and they're trying to deal with them even if there's some way to go.

We've said we on the Financial Policy Committee in our macroprudential role have said at some point, once the international authorities decide what this liquidity ratio will look like, we will probably come back to the government and ask them to give us the authority to change that in a countercyclical way. We'll have to see when it happens.

And a final comment on macroprudential regulation. The report emphasizes the problem of taking away the punchbowl on the way up, dampening the up cycles, and that's a very important part of macroprudential policy. In my view it will make, if it's executed appropriately, it will make financial institutions more resilient to the eventual downturn, but it will not be able to smooth credit and asset price cycles entirely. It may take the tops and bottoms off -- top off, maybe, not clear. But it will build resilience for sure.

I think the other point to make is, in my view, macroprudential policy needs to be symmetrical. It needs to help maintain credit flows when the economy and markets turn down, and that's a very substantial challenge. When do you release buffers that have been built up on the upside? And it's a point of great tension between micro and macro perspectives. From a microperspective, the economy is weakening, credit is turning down, people are not meeting their loan obligations as much as possible. And here these macro guys come along and tell you, well, you ought to tell the banks that they don't have to hold quite as much capital or liquidity at this point because we're trying to smooth out those credit flows. It's a very difficult call to make. Something worse might always be coming, and it's hard to damp the adverse cycle on the downside. And there's a question of will it work. Will releasing liquidity -- regulatory liquidity and capital buffers actually give the banks -- will the banks respond to that by making more loans? I think it's a particularly difficult challenge right now when the world is still fragile, in part growing



out of the problems in the euro area, but not entirely. And the buffers have not yet been completely built up.

At our June meeting, the Financial Policy Committee tried to cut through this by dealing with liquidity and capital buffers separately, so we said on the liquidity buffer we advised the FSA, the regulatory microprudential authorities, that they should remind the banks of two things. One is buffers are there to be used in stressed situations and you will not be penalized for using your buffer in a stressed situation. You'll be expected to have a plan to rebuild it but you won't be penalized for it. And secondly, that there's a central bank back here providing liquidity insurance. And in fact, the Bank of England had just augmented their discount window to provide liquidity insurance more readily to the banks, and we recommended it to the FSA and they accepted the recommendation and implemented it. In their discussions with the banks and in their liquidity requirements for the banks, they should take account of the fact that the Central Bank was providing liquidity insurance and that should meet some of the, at least a small portion of liquidity requirements for the banks. At the same time, we urged the banks on the capital side to continue to build their capital buffers as best they can by retaining earnings, going out to the market as best they could. So we were trying to release one type of buffer but build resilience in the other way by making sure that capital levels were still building up. And that was the way we tried to kind of cut through this very difficult situation in a threatening environment. Thank you.

MR. PRASAD: Thank you very much, Don, for those very perceptive comments. I think you have given us many insightful thoughts on the practical world of policymaking. And perhaps, Jean, we can start by going back to the observations that Don made about Europe that were just being proposed as necessary but not sufficient.

And you've been writing in the FT and elsewhere about banking union. Perhaps in responding to Don you can also tell us about your vision of how to get to banking union, and given the events of the last day or two, are we making progress or are we backsliding?

MR. PISANI-FERRY: Well, first of all, I would like to agree with him entirely that banking union in my view is a response to a systemic problem we have seen emerging in this crisis but which is not at all the only problem we have had with monetary union. The fact that the nominal interest rate was simply too low and the real interest rate far too low for countries like Spain during the boom years is not going to be addressed by building a banking union. It's a problem of, you know, markets that are insufficiently integrated. It's a problem of, you know, the familiar story about the fact that if your nominal interest rate is fixed and your price level increases, therefore your real interest rate diminishes, and that's an extremely powerful force that exceeds by far the countervailing effect coming from the fact that you're losing market share and that your traded good sector tends to suffer. But your traded good sector is just too small to offset what comes from your nontraded good sector during a credit boom. And that's what we have seen. So the answer is more on the macroprudential side. But certainly the banking union doesn't do anything to address that. And all the problems of how to make a monetary union work do remain.

Now, on top of that, I think the discovery of this crisis, or half the discovery of this crisis, that systemic difficulties could be much more severe than anticipated; essentially nobody except perhaps Peter Garber had seen the possibility of a balance of payment crisis within the monetary union. Now we have seen it and we've got to address it because if we don't do the financial repair, if having a monetary union with a

fragmented financial system is a totally absurd situation. The very rationale for having a monetary union is to benefit from a single financial area. So to have at the same times the constraints of a monetary union and financial fragmentation, it's just not viable. So we've got to repair that, which doesn't mean we don't have to address the rest.

Now, I would like also to be done what you said on macroprudential because I think that's, you know, something that is being experimented. I agree with you that this is a problem of symmetry. I don't know actually whether we should aim for some sort of complete symmetry or consider that it's a tool that is more effective to address credit booms and that in the end in a downturn it's not going for the reason you gave. You can reduce the buffers; you can tell the banks that they don't need that much capital. I mean, the markets will tell them the opposite, and so they are going to listen to the markets. And perhaps that's, you know, we have to live with the symmetry. But also I think we need a much better concept of beyond the instruments what is the policy doctrine for using it. And in Europe it is a particularly important issue because macroprudential policy is supposed to deal with the symmetry credit booms in the future. So what is the policy framework for it, I think we still are some way from having a clear understanding of how it should work.

MR. PRASAD: Okay, Hyun, perhaps you can respond to Don, but I'd particularly like to ask you one thing because the discussion and Don's comments give us a flavor that what is really separating the second best world from the first best world is something that we all agree might be useful, which is coordination and cooperating of regulatory policies. Is that the only barrier between the second best and the first best, and also do you see any downsides to cooperation? Could we end up in a situation where we go to the lowest common denominator? Everybody agrees on something but

it's not really going to be enough to make the financial systems stable.

MR. SHIN: I think that's certainly a danger. But first let me thank Don for those very good comments. I mean, it's always -- it's always good to have Don as a discussant. This is probably the third or fourth time that I've had Don as a discussant. Actually, once was in this very room, on September 13, 2008, two days before Lehman. And we were discussing systemic financial regulation and I didn't really expect Don to appear, but he duly came and did his duty and then went. It's, as always, good to have Don.

Now, Don mentioned something which I would like to think is true but I suspect may not be entirely true, which is that this kind of thinking has already been part of official thinking for a very long time and that it's already incorporated into the decision-making process. I think that's, you know, I generally would like to think that that was true, but I somehow have my doubts. If we think about the route that led to Basel II, for example, Basel II took 10 years, and I think the final product was very far from what we would consider as being optimal. The process itself gives rise to a dynamic of its own where the regulator community sets targets and then in order to achieve exactly this -- to find the common seat of things that we can agree on, we have to then pair down the things that we discuss. And I think that led to a set of rules that really put blinkers on some of these in a really deep-seated course of the crisis.

And here's one chart. So what you had on that chart was the way that a typical global bank would manage its balance sheet, which is -- it's in the report. Yeah, it's on the report, which is, if you look at page 10, the chart that I'm going to show you is exactly this. This is the way -- this is Barclay's -- wasn't picking on Barclay's for any particular reason, but if you look at the way that Barclay's manages a balance sheet, and

this is fairly typical of a global bank. And I would draw your attention to the dark diamonds in that chart, which is the relationship between the way that total assets change and the risk-weighted assets change. And the risk-weighted assets are really the fundamental category that the Basel process really focuses on. And what you see is that even as assets are increasing by hundreds of billions of pounds, the risk-weighted assets are changing only by a very moderate amount. And that's reflecting the fact that in a boom, when measured risks are very low, you can expand lending without necessarily raising the measured risks of the bank.

And this is a two-way process if you think about it. The bank is allowed to lend so much precisely because the measured risks are low, but then it's the increase in the supply of credit that actually leads to those compressioned losses. And this kind of reasoning was really very much absent, and I suspect it's still sort of somewhat in the background of the Basel process and the focus is very much on loss absorbency of capital. You know, we need loss absorbency of capital and it's there as a buffer. These are very telling concepts, and if we think about -- and if we apply these concepts to Europe and, you know, we can see the balance of payments, balances building up, the current account deficits were being funded through the banking sector, for a long while most people thought of that as being entirely a good thing because cross-border claims to GDP, this is a measure of financial integration, and financial integration is exactly one of the goals. And the credit of the GDP ratio is entirely a good thing because the higher it is, the better it is, because this is a measure of financial deepening.

There was really this fundamental gap between the way that we thought about regulation on the one hand and the macroeconomics on the other. And I think what is happening, and here I think, you know, we are making some progress, is to close

that gap so that we can think about the susceptibility and the vulnerability to crises in a way that we can connect the microeconomic categories with these macro categories. And I think this is the kind of reasoning that we will have to apply when we eventually, or if we eventually move to a banking union in Europe, in that it cannot simply be about these microeconomic, these microprudential categories about loss absorption and so on, but it has to be -- to the extent that the cross-border flows were really the engines of the imbalances in Europe, the odds must be that to prevent that again we need a cross-border regulator and someone who can -- an institution that can enforce stability at that level.

And I think it's that leap, it's certainly an institutional leap, but at a basic level it's also a conceptual leap as well. And one of our goals in this report was to push the thinking slightly to that in that direction.

MR. PRASAD: Thanks, Jean.

Jose, let me turn to you. Having been an emerging market central banker yourself, you've dealt with the policy challenges caused by the policies of the advanced economies and with the aggressive unconventional monetary policy actions of the big global central banks -- the Fed, the ECB, and the BOJ. Claudio Montenegro of Brazil is once again resuspected of currency wars and a lot of those flows that are anticipated might go to the emerging markets through the banking channel, do you think this is a valid concern for the emerging markets? And if so, what do you think is the right way they should be approaching dealing with this?

MR. DE GREGORIO: Well, of course we see a lot of spillovers from one of the policing advanced economies. However, I think that one has to be very careful on how to interpret and how to see what's going on. In this regard, I think as long as this is a

principle, as long as advanced economies, monetary policy decisions, may have spillovers. Emerging markets have the right to use their own tools, whether conventional or unconventional, to protect their economies. This is the way it works. There is no invisible hand. But countries try to do and central bankers try to do the best for the country, and that's what Ben Bernanke, (inaudible @ 1:06:35), and Don Kohn did for many years, so we have the right and the obligation to do it.

Now, one has to be very careful because there is this idea that as the Fed starts printing money, the money is being, you know, going all around the world and we're flooded with greenbacks. That's not true because all the money is going back through the central line. So they see an expansion of the bank. This is not costing; the money being printed by government's doing QE, arriving to emerging markets. And I think that there is a misconception on that. There is a misconception basically because starting from the point we have on their board, they know an increase in net -- a massive increase in net flows most emerging markets are exporting capital. So you see (inaudible @ 1:07:26).

Now, of course, as we discussed in the report, if flows take the form of banking flows (inaudible @ 1:07:36), but it's not that banks or let's say advanced economies' banks are putting a lot of money in emerging markets. As Jean said, there is a lot of pressure for them to lend locally and all the support that's done in European banks is for them to lend locally. So I think there is this (inaudible @ 1:07:58) from politicians around the world but I don't think there are currency wars. Some countries do currency suicide but no currency wars.

MR. PRASAD: Can I say something?

MR. PISANI-FERRY: I think Jose is absolutely right that the usually,

very superficial way that some journalists -- I wouldn't say all -- I think there are some very good journalists, but the typical popularization or vulgarization even is that somehow the dollar that's printed somehow gets into emerging markets. Clearly, it's not as simple as that, and that is clearly the wrong picture. But nevertheless, we should be, I think, careful not to simply dismiss this idea out of hand and there are lots of other mechanisms which operate in environments that are encouraged by much more permissive monetary policy, so it's not just the banking sector, for example, but it could be that there are nonfinancial. The authors disagree here but we don't disagree that much. But it could be, for example, the nonfinancial firms borrow through their offices in the financial centers and then that gets deposited in local currency. We saw that in Japan in the 1980s. We see it in China now through the offshore borrowing of dollars in Hong Kong, and those have to do much more with the interest rates and the willingness of the banking sector to lend to nonfinancials. But nevertheless, these eventually end up in the banking sector of the recipient country as well, so it causes increase in the money supply. And although we've tended to dismiss the money supply as a useful aggregate to look at, I think in many ways it's coming back much more as an important city (phonetic) to look and I think it's all part of a gradual reorientation thinking about these. So I wouldn't completely dismiss it, although we should raise the level of the debate.

MR. DE GREGORIO: It is true. Expansion in monetary policies in advanced economies will lead to depreciation of their currencies. That's the transmission mechanism. Whether that happens with flows, without flows, how that happens is these are asset prices without the need to have too much flows. So part of the tensions, the tensions are that weak countries, very weak countries -- Europe, the U.S. -- they need to gain competitiveness against the world. And part of the transmission mechanisms, in any



open economy of monetary policy is the (inaudible @ 1:10:48) mechanism. So there is no way out. There is a problem in the whole world today. That's perhaps for next year's report. But everybody wants to be competitive and that is not possible. So somebody must gain and lose, and that's a big problem today in the world. Everybody wants to be competitive. Emerging markets said we cannot bear the adjustment because we are growing. We need to be competitive, but the weak part of the world is the one who has to be competitive to the adjustment.

SPEAKER: Jean, we have very interesting discussions. I can guarantee that nobody actually (inaudible @ 1:11:26).

MR. PISANI-FERRY: Let me just support and nuance what Jose just said. I think, you know, if you look from 30,000 feet altitude, there is a major symmetry (inaudible) in the world economy. The advanced economies are all struggling with that, with private and public debt in different proportions. You know, the U.S. is more advanced in the heading of the private side but less advanced on the public side. Europe is the opposite. And Japan, you know, has been living with -- we sided for very long. And this is never to be found in emerging economies.

And so I think that's a major symmetry in the world economy. And this is bound to have lasting implications for monetary policy and we have to live with that. So this notion of currency war is completely misleading because it ignores the fact that at the root of these differences is something fundamentally different in the institution of our economies.

MR. KOHN: And furthermore, in the case of the United States, this asymmetric shock came at a time when the U.S. had been in current account deficit for a long time, and that was an unsustainable situation. And global demand and global

domestic demand needed to shift from the United States to countries that were running very large surpluses, especially countries like China that were preventing their currencies from appreciating in order to have export-led growth. I think what Hyun or Jose said, not everybody can have export-led growth, and we need to let those exchange rates adjust while taking the appropriate precautions, as Jose said, to protect domestic financial institutions from the effects of the capital inflows that might accompany them.

MR. PRASAD: Okay. We have about 10 minutes left, so it's time to get the audience involved. If you have questions, please raise your hands and please keep your questions short and precise, no commentary.

MS. JACKSON: Nancy Jackson. I'm at Johns Hopkins SAIS.

I wondered if in looking at the credit flows you all considered at all the nature of -- the change in the nature of our credit markets where so much of credit now over the last 10 years has really become asset-based and where there -- in a sense it feeds the procyclicality of the credit cycle even more if when there's an economic downturn the way those credit extensions are addressed is by closeout asset sales incasing reduction and asset prices. And whether you look at that as repo financing and the size of it and how that gets closed out or mortgage backed securities and the fact that we haven't been able to restructure mortgage debt. You can't in an economic down cycle anymore restructure to try to minimize downturn and help ease adjustment over a period of time. But was there any discussion of that change in the nature of our credit markets and how that's affecting procyclicality?

MR. PRASAD: Do you want to take that Hyun?

MR. SHIN: That's a very good question. I think this is especially of interest to a U.S. audience. I think there is certainly an element of truth in that and in

terms of our categorization, in terms of raw taxonomy, the advent of more market-based funding, more repo and NBS-style instruments, that's a reflection of if you like the demand for leverage and it's really a reflection of this non-core/core distinction.

But on the other hand we should -- if we take a step back and look at the global picture, and in particular, if we look at what's happening in Europe, in Europe and in Spain in particular, there is a good old-fashioned banking crisis. It has nothing to do with -- well, very little to do with innovation and all the complexity and the inability to renegotiate and so on. And so if you like, rather than being bogged down in the details, we thought that we should really take a step back and take a look at the bigger picture. In that respect I think we should perhaps -- and here our perspective was global rather than simply the U.S.

MR. KAROFKY: My name is Pere Karofsky, Voice of Noise Foundation.

I cannot say as Jose de Gregorio that I was a baby in the last crisis of the '80s. I lived them quite hectically. But there is a big difference from those years to now, and those are the capital requirements based on risk perceptions. We speak about free flow of funds, going after the returns of assets. That's not around anymore. They're going after the returns on asset as they produce return on equity, and it's very different, an asset that can be leveraged 60 times our equity than an asset that can be leveraged only 10 times to equity. So we don't have free flow control. We have one of the most insidious capital controls ever that is really taking the flow of funds toward the area that is officially determined as being not risky and away from small businesses and entrepreneurs and all that that are officially deemed as not risky -- as risky. How can we get out of this immense distortion that is in the system?

MR. KOHN: I think it's very difficult. It's an ideal world. Those risk weights and perceptions of risk built into the regulation is what actually line up with the actual risk in the real world. I mean, I think -- and then they don't. And I think part of the complication we've gotten into is the multiplicity of risk weights and models and trying to use models to get that right.

Now, the global Basel III has moved a little bit away from that in terms of having a leverage ratio. But the -- so nothing -- everything is weighted the same, but there are a lot of problems with the leverage ratio because that gives banks an incentive to be in the most risky assets. So I don't think there are any actually easy answers.

MR. SHIN: I fully agree. I think that they figured three in the report is quite good and it shows exactly how you can keep your risk-weighted assets and increasing labor rates. But I think that the combination of risk weight assets (inaudible @ 1:18:25) because two different caps should help. And yeah, when one looks at risk weight and the weights of -- the risk weight of different classes of assets, mortgages are 50 percent and are the most dangerous things. And sovereigns are zero percent. So a Greek bond is no -- so I think the way of which to combine both of them and put them on an equal footing, a risk-weighted asset, a risk-weighted asset that constrains, and (inaudible @ 1:18:56).

SPEAKER: (Inaudible)

MR. SHIN: It's inefficient but it's less risky.

MR. PRASAD: Okay, yes.

SPEAKER: (Inaudible) I have two questions, if I may. One is a question to the former Central Bankers. As we have this discussion in Europe, whether it's correct or whether it's the right way to give the banking supervision authority to the Central Bank

out of fears for the independence of the Central Bank and out of conflicts between supervision and Central Banks. So my question to the former Central Bankers on the podium is what do you think about that? And is it the right way to give financial supervision authority banking supervision authority to Central Banks?

And my second question is looking at the European crisis; one of the biggest problems seems to have been that there was some kind of credit boom bringing credit from countries like France and Germany to the power-free countries. If you think about your proposal in the report, especially concerning the eurozone, what would have central banking supervision authority have done differently? Would they have prevented German and French banks to invest heavily and give credit to a massive degree to Greece or to Spain or to other countries? What would have been exactly different under your scenario than we have seen in the last years?

MR. PRASAD: Maybe we can take that last question first.

MR. SHIN: So Patrick, I would direct you to the final paragraph of the main part of the report. This is exactly where we say, you know, for the euro area, which has already this common currency, I think the centralized banking regulator had looked at these gross flows -- actually, in this case it's also net flows as well between borders. If the banking regulation had been sufficiently tough on the use of let's say whole funding that's coming across the border, or even just tough regulation full stop would have meant that these kind of cross-border flows would have been mitigated. But as we say in the report, so that's one type of model.

The other type of model would be a much more conservative banking regulation applied at the national level, which would have the beneficial side effect of mitigating these flows as well. But as we say, the middle ground, the fragmented

financial systems with unimpeded capital flows has been shown by recent events to be untenable.

Now, I think this has some important implications for what that regulatory system might look like. You know, for instance, I think, so some people have mentioned the Fed in the U.S. as one possible model to go where the systemically important banks would be regulated by the ECB and the smaller banks by the national regulators, but if you look at what actually happened, that probably wouldn't have done much good. In Spain it was the Kahas (phonetic) who actually borrowed wholesale, and they were not the systemic important banks in terms of their asset size. And so I think one type of model might be, so rather than having ECB central bankers going to individual savings banks and looking at the books, you could have a rulebook that is set by the central -- by the central regulator. And the rulebook itself is based on these macroprudential principles. And so there you would monitor these aggregate flows, how large are these noncore liabilities. So these would be generalized monetary aggregates because they would include these interbank flows as well as the standard monetary aggregates.

And then once you have those you would then self-contract the actual enforcement to the national regulators for the smaller banks. I think that would be one type of model. But I think it's very important -- but at the base what's very important would be the philosophy behind the regulations. So rather than thinking purely about loss absorbency and stepping back and patting yourself on the back, that the capital levels, the risk-weighted capital levels of your banks are very high and not looking at these broader aggregates. You would then actually look at these broad aggregates. I put them right at the top of your monitoring list. Look at the systemic stability as a whole.

So I think it's -- I think the tools are pretty well-known. I think it's more

the political constraints and the perspective. And I think it's not clear what the sequencing of those two would be, but in a way you need the perspective in order then to be able to persuade the politicians. So I think that would be the right kind of sequence.

MR. KOHN: And I think as you point out in your report, Hyun, that coming up with the indicators to motivate the use of these tools will be very, very important. And to explain, to be accountable so you can explain to the public why you are increasing capital requirements in a very clear way will be important and we are just beginning to come to grips with this indicator problems or the phenomenon of looking at what -- figuring out what we should be looking at to spot these growing imbalances. Some stuff was obvious, but even the obvious stuff can give you false positives sometimes.

MR. PISANI-FERRY: Just a word on that and then we should leave it to the central bankers as it belongs to the central bankers.

There is no such thing as a perfect supervisor for sure. But if you ask yourself what went wrong in Spain, it was largely that there was much too much political interference with the work of the supervisors, and there was much too much capture. So it's a matter of political economy in a country where everybody gets excited about real estate boom and everybody wants to participate in it. I ask the people in the Spanish government why is it that you didn't act? And the answer was there was no -- it felt politically impossible to do what they should have done, to raise taxes, to eliminate the (inaudible @ 1:25:23) tax addiction of mortgage interest. And this was politically not possible in the Spanish context. So, you know, by bringing in people who are not part of this political game, you may gain something and you may have the scrutiny. Everybody knew, in fact, that Spain was undergoing every kind of crazy development, but the

Europeans kept silent. They didn't want to interfere because they didn't want to, you know, to be accused of interfering with something that was Spanish sovereignty.

Now, what we have learned is that the neighbors, they are paying the price for what happens in a neighboring country, in a partner country. So they have a legitimate reason to intervene, and I think, you know, again, this is certainly not to say that by bringing it to the European level you're going to make it perfect, but you may correct some of the political economy failures that you have observed.

MR. PRASAD: Okay, Jose. You have the last word.

MR. DE GREGORIO: Regarding your question, I won't go into it in depth, but I think that the best system is to separate prudential macro relation from central banking, but the Central Bank has a strong say on financial stability, global financial stability, macropolicy, too. I think that will be -- and they saw this thing that has been done in advanced economies in many major markets, creating a financial stability currency. So I think that that should be the way to go. Why to separate the Central Bank from the microprudential? Because they are conflict of interest. Whenever you want to tighten monetary policy but if there is a weak bank so the people, then maybe. So to separate them, to make them to work in many countries in Chile, will have many of the regulations have to be commended by the Central Bank and the Central Bank has a lot to say on the broader relations.

Now, let's go to Europe. I think Europe has the worst case. It has a completely fragmented supervision in the hands of sovereigns that are not in a strong financial position and with all the political conflict. I have to address an anecdote. At some point we will have to sit with Don and write all the things that we hear in our lives and that they change, but there was a famous European economist I won't mention even



to my friends, that (inaudible @ 1:27:48), the U.S. has the worst financial system today and why Europe is doing fine? Europe is doing fine because supervision was in charge of central banks.

But now what's the case of Europe? I think that the best in the banking (inaudible @ 1:28:08) with a separate supervisor from the ECB. But to build an institution is completely impossible. It would take ages. So I think that the second best, here we come to the report again, the second best is to go with the ECB by all means because they are also -- you have to have an independent and very competent institution in charge of supervision.

MR. PRASAD: Okay. Thanks, Jose. So with that I'll wrap up. But before wrapping up I do want to do one thing which is to acknowledge Quinn (inaudible @ 1:28:36) who has been very important in this whole process, holding the whole committee (inaudible @ 1:28:41) administratively. Thank you, Quinn. And thanks to our very distinguished panel for what I think was a very blazing discussion. I'm not entirely sure at the end whether to feel encouraged or discouraged, but at least we have things out in the open in an analytical sense. So thank you very much to all of you.

(Applause)

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