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MAKING MACROPRUDENTIAL POLICY WORK

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P R O C E E D I N G S

MR. ELLIOTT: Good morning, everyone. Good morning and welcome. I'm Doug Elliot of the Economic Studies program here at Brookings.

We're fortunate today to have José Vināls on my immediate right as our keynote speaker. He's presenting the views of the International Monetary Fund about Macroprudential Policy. He will be referring to three papers on the topic that the IMF is releasing this morning. We have copies of those papers out there and I'm piggybacking on it. I have my own recent paper out there as well on "Lessons from the Last Century of U.S. Macroprudential Policy."

Charles Taylor and Donald Kohn, the next two over, will be adding their own commentary to José's remarks, and I'll explain Erlend in a second.

You have detailed bios of the participants, so I will keep my introductions brief.

Jose Vināls is the IMF's financial counselor and he's director of Monetary and Capital Markets Department. Most of his earlier career was at the Bank of Spain where he rose to be deputy governor. He is a leading expert on global financial issues and we're quite delighted to have him here today. Thank you again, José.

Charles Taylor is deputy comptroller general for Capital and Regulatory Policy at the Office of the Comptroller of the Currency. As such, he also plays a leading role in international bodies, including the Basel Committee on Banking Supervision. His earlier career focused in various ways on the management of risk in the financial system which is essentially what macroprudential policy focuses on.

Donald Kohn is my colleague in Economic Studies here at Brookings,

where he is a senior fellow. He was, of course, vice chairman of the Federal Reserve Board. He's also a member of the UK's Financial Policy Committee, which is their new macroprudential authority.

Before I make a brief introduction to macroprudential policy, let me review the sequence of the morning. José will lead off with an overview of the IMF's conclusions about optimal macroprudential policy. Charles and Don will follow with about 10 minutes of comments each. The speakers will then -- actually, they're already on stage here, slight change of plans -- at the end we have Erlend Nier, who is at the IMF and is one of the principal authors of the papers that you have outside.

I will moderate a discussion among these participants and then I will open up for questions and answers from the audience -- rather, questions from the audience, answers from up here, a point I will stress later.

(Laughter)

MR. ELLIOTT: Macroprudential policy is a relatively new concept that has gained considerable currency since the financial crisis. There is not yet a single accepted definition but it generally refers to the use of regulatory tools to reduce the overall level of risk in the financial system. It falls between monetary policy, which operates at the level of the economy as a whole and traditional prudential regulation of individual banks and financial institutions. The latter is now referred to as microprudential to distinguish it from macroprudential.

The recent financial crisis demonstrates the need for macroprudential policy as an important complement to microprudential regulation. Focusing on each individual financial institution helped lead regulators to miss certain system-wide risks,

including contagion effects and fire sales such as arose after the collapse of Lehman. Similarly, macroprudential policy usefully complements monetary policy, which is a blunt instrument for financial stability purposes since it impacts the economy as a whole rather than narrowly focusing on the financial sector.

There are -- it's probably obvious -- overlaps between macroprudential policy and these other two areas, and I know José will address that.

Macroprudential policy is further divided between structural policies that attempt to reduce systemic risks across all points in time and cyclical policies that try to reduce the size of the booms and the busts in the financial sector or to minimize the impact on the real economy from problems in the financial sector.

The ongoing reform of derivatives regulations is an example of a structural macroprudential policy which attempts to improve safety across all time periods. A key example of a cyclical macroprudential policy is the new requirement for additional capital buffers in boom periods known as countercyclical capital.

So with that introduction, let me turn the podium over to José Viñals. José, thank you again.

(Applause)

MR. VIÑALS: Good morning to you all. Let me thank the Brookings Institution for hosting us today and Doug Elliott in particular for working hard to arrange this meeting and also for his introductory remarks.

I think Doug has already told you that macroprudential policy is there to ensure the stability of the financial system, to take care of systemic risk, and in doing so it is filling a very important gap in the policy tool kit which was sort of discovered in a way at

the beginning of the financial crisis. It was clear that the combination of macroeconomic policies, like monetary and fiscal policy, and microprudential policies, which are aimed at the health of individual financial institutions, were not sufficient to deal with systemic risk. In a way, one can see the trees, but if the trees do not allow you to see the forest, you are in trouble. And this is what macroprudential policy is all about -- allowing you to see the forest as well so that you don't have these types of problems.

Much has been learned in the last few years since the beginning of the financial crisis, and today we are in a much better position than we were then in understanding the various aspects of macroprudential policies, and this has been thanks to a number of things -- to the experimentation that has taken place in a number of economies, both advanced and emerging, to the analysis, research, and policy development that has been carried out by leading academics, by important think tanks like this one, by practitioners and by international organizations like the AMF, and it is in this vein that today we are publishing our key report on the fundamental aspects, the key aspects of macroprudential policy, which is implemented with a couple of background papers and Erlend Nier, who is here with us on the podium, has been one of the leaders of this effort together with a number of colleagues -- John Brookmeyer and so on who are sitting here today.

So I think that macroprudential policy would have been very important to have in place before the crisis. It would have saved a lot of problems. It has been important to be put in place over the last few years and I think it remains particularly important now both for advanced economies and for emerging markets which need to cope still with significant challenges.

And in the remarks that I'm going to make today I would like to focus on four specific issues. One is to say something more about what is the proper objective of macroprudential policy. Then I will talk about the synergies and potential tensions between macroprudential policy and other policies, in particular monetary policy and microprudential policies. Then, I will make some comments on who should run macroprudential policy, and finally, I will talk about what are the main limitations and challenges that have yet to be addressed in order to make macroprudential policy a fully effective policy tool. And I will conclude on the role that the IMF can play.

Regarding the proper objectives of macroprudential policy, as I have mentioned before, it's there to maintain, to help reserve financial stability, to address systemic vulnerabilities. Two key drivers of systemic risk are particularly important. The first one is in the time dimension and macroprudential policy can play a big shock in helping counter excess procyclicality, which is the tendency of the financial system to experience leverage and liquidity cycles which end up with too much risk taking, too much leverage, asset price booms, credit booms in good times, which when the credit cycle turns around can get the economy into significant trouble as we have seen. So over the time dimension, macroprudential policy can be very helpful in combating this excess procyclicality.

But macroprudential policy can also be very important in helping deal with a cross-sectoral dimension of systemic risk which is the buildup of vulnerabilities in certain financial institutions and markets that are particularly important, highly interconnected within and across national borders. And these are segments of the financial system which are systemic in a way too big to fail. So one also needs to

address this component of systemic risk.

But if these are the things that macroprudential policy can do and should do, what are the things that macroprudential policy cannot do and shouldn't do? And the reason why I mention this is because we have seen instances over the past few years where in different countries, particularly in some emerging markets, macroprudential policy has been asked to do things that may be should not be done by macroprudential policy. For example, macroprudential policy cannot control asset prices or exchange rates, should not -- cannot control or manage heavy demand or very, very strongly influence external balances. While macroprudential policies may have some effects on these variables, this is not the main role of macroprudential policy. If you have aggregate demand issues, if you have external imbalances, it is the main role of other more fundamental policies to be there.

But governments sometimes can be tempted to use macroprudential policy as a substitute for other policies -- monetary, fiscal policies, structural reforms, which involve difficult political decisions. So macroprudential policy should be used but should not be abused. And I think that this is something that we need to keep in mind. Macroprudential policy is a complement, not a substitute for other policies.

Let me turn now into the second issue that I want to discuss today which has to do with the potential synergies and tensions and conflicts between macroprudential policy and other policies, and I will start with a pair of monetary macroprudential policies.

In a first-based world, monetary policy takes care of price stability and upward stability when this is the explicit mandate of the Central Bank, while

macroprudential policy takes care of financial stability. But as we know very well, there are interrelationships between price stability and financial stability and it may be the case as we saw before the crisis that monetary policy may have undesirable side effects on financial stability.

Let me give you two examples. Before the crisis, accommodative monetary conditions in a context of low inflation which were justified by low inflation contributed to the excessive credit growth, asset bubbles, and other financial excesses which ended up undermining financial stability. And in small open economies, it is often the case that you would need to go to much higher domestic interest rates in order to control inflationary pressures but then this may result into very significant capital inflows which may also post challenges for domestic financial stability.

So the key question is what can macroprudential policy do for monetary policy? And the answer is it can be very, very helpful. Macroprudential policy can be used to address the unintended side effects of monetary policy and therefore, it allows monetary policy to enjoy fuller room for maneuvers in pursuing its final goals of price stability and upward stability. And at the same time, macroprudential policies can be very useful because by enhancing the resilience of the financial system to adverse shocks, it minimizes the probability that monetary policy would have to bring interest rates down so much as to go beyond the zero lower bound and therefore, it avoids that the monetary policy authority runs into constraints such as a zero lower bound on interest rates which prevents you to bring interest rates, nominal interest rates, below zero when the real interest rate should be much lower. So when the financial system is resilient, it is less likely that the monetary authority would heed the zero lower bound constraint on interest

rates.

In contrast, where macroprudential policy is missing or it is insufficiently effective in addressing financial stability issues, monetary policy would be left on its own and while still aiming at its final goals of price stability, upward stability, would need to take financial stability considerations more into account by leaning against the buildup of financial imbalances.

One case which I think is particularly important and challenging is that where countries have institutional constraints on their monetary policies that come from pursuing a fixed exchange rate regime, like for example in Hong Kong, or by being part of a currency union such as the euro area. In the latter case, as we know, even if the monetary policy stance is right for the area as a whole, it may be, as it happened before the crisis, that it can't contribute because of the differences in the cyclical positions of different positions, to the buildup of credit booms and asset bubbles as it happened, for example, in Ireland or as it happened in Spain. And this is something which makes it particularly necessary to put in place macroprudential frameworks that address the buildup of this type of financial imbalances at the national level.

So what I have tried to explain is that there are very important complementarities and interactions between monetary policy and macroprudential policy and that it is very important that one puts in place strong macroprudential policy frameworks in parallel with strong monetary policy frameworks which already exist in many countries. And also, these interactions call for an adequate degree of collaboration between the monetary authorities and the macroprudential authorities which, of course, should be fully respectful with independence of the Central Bank.

Let me now discuss the issue of the cohabitation between macroprudential and microprudential policies. In principle, microprudential supervision should work hand-in-glove with macroprudential policy, and indeed, the revisions that were made in the wake of the crisis to the Basel core principles now places a much stronger emphasis on the need for a macroprudential perspective in supervision. But a key question is whether there would be a happy marriage between the two policies or whether there are going to be significant tensions arising. One way of making sure that the marriage is a happy one is that the macro and the microprudential policymakers share information, carry out joint analyses of risks, and keep open always a strong dialogue that can help reinforce the complementarities between these two policies. And indeed, I think it is essential to have a sound macroprudential policy framework in place as something which will be particularly useful also for the macroprudential authority. It is a great source of information on risk and also because macroprudential policy relies on prudential tools, these have to be instrumented through the microprudential supervisor across financial institutions.

But it's also the case that tensions may arise, and these tensions between the two types of policies may be particularly important in bad times. Not so much in good times. In good times there's likely to be an alignment of the objectives of the micro and the macroprudential authorities in the sense that both of them are likely to want, for example, banks to build capital buffers even at a time where there may be little sense of urgency in the industry amid ample profits and limited nonperforming loads. There may be perhaps a different view in terms of how high the buffers could be with the macroprudential authority is likely to imply higher buffers to take into account the

systemic externality risk aspects, but other than that at least the objectives should go in the same direction.

But it is in bad times when there may be tensions, and I would just give the following example, which is that as we saw Europe recently, a couple of years ago, the microprudential authorities did call for higher bank capital ratios, and in my view, quite rightly so, while there was a macroprudential concern that this could lead to an excessive deleverage and credit contraction which would have adverse consequences on the economy, and I think that this concern was also quite legitimate.

How can one address this type of potential tensions? Well, for me, the best way of doing that, of addressing these conflicts which tend to rise in bad times, is to establish sufficiently high buffers in terms of capital in good times. This allows that once the bad times come the macroprudential authority may be in a position to reduce these buffers in order to let's say (inaudible) credit, but in a manner that respects microprudential objectives of having sufficiently high capital in individual financial institutions.

But even when initial buffers prove to be inadequate, and you come to bad times with banks not having sufficiently high capital buffers, conflicts can still be resolved through well-designed protectional action. For example, if the microprudential supervisor would like to increase the capital level in individual banks, insofar as this is done by increase in the level of capital in the numerator of the capital ratio, this is something which will prevent the financial institutions deleveraging, shrinking the denominator of the capital ratio and this should be consistent with the macroprudential objectives of not excessive deleveraging, not excessive credit contractions. So there are

ways by working through increasing the levels of capital rather than increasing the ratios -
- the capital ratios by reducing bank assets that can't allow the objectives of both types of
authorities.

Let me now go to the issue of who should run macroprudential policy.
And here in the Fund we have looked at it very carefully and we have looked at the
different conditions of different countries, and it's clear that there is no "one size fits all"
model, and that countries are likely to choose at the end different models which reflect
different legal systems, traditions, and political economy considerations.

So what we have done is to establish some key principles that need to
be followed to ensure that whatever arrangement is chosen, the macroprudential policy
would be effective. And there are three principles I would like to refer to.

The first one is that if you really are interested in preserving financial
stability, someone must be in charge of turning the policy wheel. The second is that
regardless of who this someone is, the Central Bank should always play an important role
because it combines the necessary expertise to analyze microfinancial risks with an
incentive to ensure that macroprudential policy does its job. The Central Bank has
expertise on the transmission mechanism of monetary policy, which may be very
important in understanding what the transmission mechanism of macroprudential policy
may be; has an incentive to ensure that macroprudential policy does its job because
otherwise monetary policy may be overburdened; and in many countries the Central
Bank is unique and been insulated from lobbying and political pressures which is
important to run professionally macroprudential policy.

There are different arrangements that one can envisage -- arrangements

like in many emerging markets, particularly in emerging Asia where the Central Bank is in full control of macroprudential policy and macroprudential policy is just one department of the Central Bank. Other arrangements, like those of the United Kingdom, where Don Kohn is playing a very important part now, where there is a dedicated committee structure within the Central Bank, or the United States' model where you have a council outside of the Central Bank structure but which nevertheless allows the Central Bank to participate together with other macroprudential supervisors like is the case of the OECC that is represented here by Charles Taylor.

So regardless of what the arrangement is, the Central Bank should be always playing a very important role even if it's not directly sort of running the show.

And the third key principle is that whoever is at the end giving the mandate of turning the policy wheel needs to be given adequate powers. Powers are needed to wheel tools; powers are needed to gain access to information which is needed to assess systemic risk; and powers are needed to initiate an expansion of the range of available tools and their scope of publication. And a concrete example of this would be the power of the FSOC in the United States to design institutions as systemically -- financial institutions as systemically important.

Let me now go into what are the main challenges and limitations faced by macroprudential policy. And I would list mainly the following. First, where are the systemic risks? And speaking of systemic risks is easy, but monitoring -- identifying, monitoring, and controlling systemic risks is quite difficult in practice, not least because of the limited availability of data. And this is something which is particularly important in the shadow banking system, and in addition, regulatory arbitrage can further complicate a

task as some financial activities may migrate from the banking system which is more regulated and is going to be more regulated towards the shadow banking system.

Here I want to mention the very important work that the Financial Stability Board is doing in trying to ensure adequate monitoring and regulation of the shadow banking system. So this is the first challenge, to properly monitor and identify and assess the importance of systemic risks.

The second has to do with the challenge that macroprudential policymakers have regarding the impact of the policies. And here there is considerable uncertainty over the transmission mechanism of microprudential policy. And while we have made significant conceptual progress over the last few years in understanding conceptually the channels through which microprudential policy may be transmitted to the rest of the economy, the strength of these effects is often very uncertain. So we are here at the beginning of a learning process which is going to be long and which requires considerably more data and analysis until we can have a sufficiently satisfactory idea of what the specific impact of microprudential policy and financial stability.

The third key challenge is how to communicate. And as you know, communication challenges can be very important, and in the case of microprudential policy it would be particularly so because it's a relatively new policy. It is not easily understood because it relies on a range of instruments that may appear technical, countercyclical, capital buffers, dynamic provisioning, loan-to-value ratios, debt-to-income ratios, liquidity ratios. So all of this seems quite technical, difficult to understand, yet they have effects that are quite politically controversial because they binge on particular groups in society.

And I think that the recent experience of Central Banks in communication where Central Banks have increased quite significantly the range of their policy levers which has complicated communication, well, this is something that microprudential policymakers should take note of because they also have quite a wide range of policy levers so communication will be a particular challenge.

And the last challenge I want to mention has to do with a political economy one, which is how to ensure that microprudential action is taken on a timely basis. And this is because microprudential policy may be subject to a strong bias in favor of inaction. Why is that? Because while the benefits of microprudential action are not visible at a given point in time as they basically only accrue in the future, while the costs can be very visible and typically felt immediately by potential borrowers as well as the financial industry that is likely to be lobbying pressures and political pressures to delay or to stop macroprudential action. So this is the so-called inaction bias.

So the key question is whether the macroprudential authority will have what it takes to take the punchbowl away at the right time despite this inherent inertia. And the answer is yes, if you put in place strong and explicit governance and institutional frameworks so that you have the proper ability to do what you need to do in addition to the willingness to do so. But that is absolutely of the essence, not politically you see, but critical.

Let me now add some thoughts on what is the role of the IMF in all of this macroprudential policy ambit. It is our view that the IMF can play the role of a macroprudential facilitator at the global level. For example, in collaboration with the Financial Stability Board, standard setters and country authorities, we consider within our

mandate to help ensure the effective use of macroprudential policy through a variety of channels. The Fund can continue and will continue to act as a global risk advisor in terms of identifying and assessing the importance of global systemic risks through our multilateral surveillance products, like the Global Financial Stability Report, The World Economic Outlook, The Fiscal Monitor, the Spillover Reports, and the Early Warning Exercise, but we will also step up the macroprudential policy dialogue with our member countries through our bilateral surveillance, Financial Sector Assessment Programs, the FSAPs, and also our technical assistance.

In addition, because there is a lot of experimentation going on in different economies which have recently put in place new frameworks to conduct macroprudential policies such as in the UK, in the United States, and in many other economies, there is going to be a lot of learning by doing in the next few years, and there is going to be a lot of trial and error for quite some time. The Fund can certainly provide platforms for its members to facilitate the change of experiences and best practices and therefore to accelerate this learning by doing so that countries do not only learn from their own experiences but also learn from the experiences that others have had in trying to conduct macroprudential policy. And this sharing of experiences and best practices is something that will naturally feed back into the Fund's own research and policy development, and indeed, the papers that we are publishing today already have incorporated this type of feedback.

And finally, by facilitating a global dialogue, the Fund can also promote a better understanding of something which I think is very important, and that is the spillovers and the cross-border stability implications of national original macroprudential

policies. After all, in an interconnected world, setting macroprudential policy right at the national or at the regional level does not guarantee that the overall global mix of these national policies will ensure global financial stability, and the IMF can play an important role in identifying instances where the supposition of reasonable national policies may not be conducive to global financial stability.

So let me conclude now by emphasizing the following three recommendations. The first is to be hopeful, because now one has one more tool in the toolkit which is a very important one for addressing systemic risk. So use macroprudential policy to fill the gap in the policy toolkit. The second is to be humble because there is still a lot to learn and there are still important limitations and challenges facing macroprudential policymakers. And the third is that one should use but not abuse a policy that is meant to complement and not substitute for the policies. As we all know, ensuring financial stability at the national and global levels is a shared responsibility, so let's try to make it happen.

Let me stop here.

(Applause)

MR. TAYLOR: Thank you very much for this opportunity, Doug, and thanks to Brookings Institution for facilitating this event and José for the work that he and his department has done at the IMF to move forward this very important topic of macroprudential policy and supervision and regulation.

My remarks today are my own. They don't represent the policies of the OCC or the United States Government. This is something I'm still getting used to saying but I think it's an important caveat to what follows. Nevertheless, I was informed by the

perspective of my agency today, I think we welcome this analysis because the IMF is in a unique position by virtue of its role and resources to help improve our understanding of macropru issues.

I represent the OCC on the Basel Committee, and we tend to think of the world a little bit in micropru terms, and so, of course, does my agency, the OCC. But I think we're all macroprudential agencies today. We all recognize that it's not sufficient to think totally only in terms of individual institutions. It goes beyond I think even our focus on the Basel Committee on SIFIs and to thinking more about the interactions between different financial players -- the dynamics, the first and second round effects that can be destabilizing during periods of stress. And of course, we've been for a long time concerned with the credit and leverage cycles, so we are recognizing I think more openly than we have in the past that our business is macroprudential as well as micro.

I found this presentation and the papers that it foreshadows are comprehensive and provide an excellent framework. The time, the structural dimensions are both important and distinct. The potential, as well as the limits of macroprudential regulation, the value of a resilient financial system which moderates its responses to shocks and is limited in its imbalances from the point of view of effectiveness of other complementary policies. I think the principles of policy governance of someone being in charge or the Central Bank having an adequate level of involvement and there being sufficient powers are important ones to announce and the challenges around data, strength, communications, and the inaction bias, the punchbowl program I think are important ones for us all to be aware of. And I think the Fund's role has been very well explained. It is in a unique position to facilitate dialogue encouraged by its practice and

to look at and help us to resolve cross-border effects.

Let me just point to one or two areas where I think not too much the Fund but all of us perhaps who are interested in macroprudential policy need to think a little bit more broadly. These are I could say either criticisms of our way of thinking about macroprudential policy today or they're questions about directions in which perhaps macroprudential policy should be extended a little.

So firstly I'd point to incentives. And I'm not thinking of incentives for institutions so much as individuals. This, of course, is a classic microprudential issue aligning the incentives of material risk takers with the public interests in the stability of financial institutions, but I think it extends to macroprudential issues as well. I would expect compensation rules that encouraged good microprudential behavior over relatively long-time perspectives to have a stabilizing effect on markets through other mechanisms as well as the stability of the individual institution is concerned through perhaps a more patient attitude towards price volatility, through more industry cooperation on institution arrangements, and perhaps some heightened concern amongst individuals about tail events. So I would suggest that although it seems maybe one step removed from macroprudential regulatory concerns, it's worth thinking about compensation issues and the impact that they can have on the stability of the system as a whole.

A second point which comes from a rather different perspective is to sort of reflect on how diverse or homogeneous -- heterogeneous our financial system is. I think if you -- we normally think of the financial system in terms that are dominated by and have been thought through in language of traditional economics but you can think of the financial system more so as a population. As a population of institutions, a population

of individuals that are co-evolving. And we know from studies in other subjects that populations can be more stable if they're more diverse simply because they'll have different reactions. A diverse population will have population members who have different reactions to different sorts of stress and they'll have different degrees of vulnerability to different sorts of stress so that by contrast a system where everyone looks much like one another, the odds of an event that shocks one institution shocking them all goes up. So there's real value and diversity if you're interested in systemic stability I would argue.

At least it's worth having a look at it and it's worth monitoring. I don't think that it's something that we have spent much time thinking about nationally or internationally yet. The first step would be to try and define the relevant dimensions of diversity and then the second would be to start to observe it and to see whether diversity is increasing or decreasing over time where pockets of diversity are most noticeable and where diversity is most absent. I'm not sure if we can encourage it. It's a difficult thing to encourage but perhaps we cannot discourage it by rules perhaps that are too constraining.

I'd point to another area that is on the fringes perhaps of what we normally think of as macroprudential regulation, but I think we've made a start on it nationally and internationally, but there's much more to be done. And that is, as I referred to the importance of good data analysis. What I'm thinking of in particular is the work that's been done by the FSB in establishing legal entity identifiers internationally. This work has been underway now for a year or two and is making good progress towards standardizing something that's immensely elementary really -- the idea that ever

legal entity and financial markets should be identifiable you would think be 101. But it isn't. It's actually quite difficult to establish unique identifiers.

Even more challenging is establishing an accepted international ontology for financial transactions, and this is a project that I think still concerns many in the private sector. They see great advantages to having sort of a single language or at least a single way of describing aspects of financial transactions and contracts so that it is possible for two parties to a contract to agree as to what exactly they have agreed to in different contingency situations. This again you would think would be pretty much something you could depend on but in fact, it's not the case at all. There are great differences between institutions and even within institutions. And I think it's seen as something that could have great value for studying and understanding the financial system as a whole, but it's also of value at a microprudential level and perhaps that's where some of the major impetus for support for it has come from in the last two or three years where chief risk officers would love to be able to know what happens in one part of the large organization when it's being described in certain terms is the same as what's happening in another when the same terms are used. So just a question of getting the ontologies standardized I think is a major project. And I'd like to see more emphasis given to this internationally.

Let me just mention one more thought I think regarding the inaction bias, and I'll stop there. The punchbowl problem is one that has consumed a lot of time and energy and concern amongst regulators, both macro and microprudential since the crisis. And I think that one approach that has been articulated that is worth taking a more careful look at is the value of simple rules, simple dynamical rules, such as whether or not there

can be some sort of a rule based on the rate of credit growth in relation to GNP perhaps adjusted for changes in prices, changes in underwriting standards, but something that's relatively straightforward so that it's possible for regulators and industry participants to anticipate responses to changes in the industry's aggregate behavior.

The second idea here that I think is worth thinking about and it's one in which we're giving some attention at the Basel Committee at the moment is this question of how to enhance the ability of regulators to respond to emergent signs of crisis. The difficulty here is that -- it's twofold, really. As José alluded, there's often political pressure against acting, but secondly, there's often not a clear enough signal that it's clear action is needed today as opposed to tomorrow. It's very easy when it's like the frogs in the frying pan. As the temperature goes up there's never any particular moment when they should jump, and the same way when you're a regulator, it may be that you should and you can see that you do need to limit the rate of expansion of credit perhaps over in a particular area or to tighten underwriting standards in a particular area, but it's not quite clear you have to do it today. Maybe you can do it tomorrow. Maybe you should get a little bit more evidence before you act. Perhaps the long-term trend or long-term average is only a point of reference rather than something that should be treated as a ceiling and so on.

And I think to get around that particular problem it's important to think about ways we can increase the transparency of supervision and regulation and look more to providing our external stakeholders -- politicians, the industry and others -- with a clearer picture of what it is that supervisors and regulators are doing and what kind of impact they have. By telling a clearer story about what it is that they're trying to do and

then explaining how their actions have achieved those results, perhaps both in the micro as well as the macroprudential arena, I think it may be easier when the time comes for authorities to take difficult action to restrain a potential destabilizing expansion in credit or some other development that might be adverse in terms of heightening systemic instability.

With those thoughts I think I'll turn it over to my colleague down the way and say once again thank you very much for an excellent paper and for this chance to comment on it.

(Applause)

MR. KOHN: Thank you, Charles, and thank you, Doug, for including me in this event.

This is a good paper. I comment it to -- actually, a set of papers to be more accurate, and José's speech, it's a summary of where we are in a rapidly changing macroprudential regulatory landscape and the challenges ahead. And I agree with José that the attention to macroprudential policy is potentially a very, very useful reaction to the crisis. Many Central Banks had vague responsibilities for financial stability, had an objective in their charter, either implicit sometimes or explicit. But they didn't have the instruments really to execute on macroprudential policy. And produced a lot of fancy, glossy financial stability reports without much ability to follow through on what they were reporting on.

Now, the underlying cause of the crisis as many have pointed out might have been complacency brought about by the great moderation, rising real estate prices, et cetera, but no one had the responsibility or the tools or the decision structure to

execute -- to counter that procyclicality in the financial system and build resilience to the inevitable cyclical overshooting in debt and asset prices. Now we have those tools and structures. They've been built and I think José and his colleagues at the IMF have done a great job in describing them and talking about the way forward. Our challenge is to operate macroprudential policy in highly-developed, globally-integrated financial markets. Emerging market economies have operated macroprudential policies for a long time in kind of confined spaces and they used, as Doug has pointed out in his very interesting paper that he along with some other colleagues have written about the history of macroprudential policy. In the United States there was macroprudential policy in the United States but it fell into disuse -- changes in reserve requirements, credit controls, margin requirements on equity, and I think it fell into disuse because of the development of financial markets meant that there were just a lot of alternatives to instruments that were focused narrowly on particular institutions or particular markets, and our challenge is now to develop broader instruments to damp the procyclicality of the financial system even in this globally integrated world.

And I want to highlight three issues, two of which just to emphasize something that José said and then a new one.

So the first one is to underline the complexity of the macroprudential monetary policy interactions. I agree with all that José said and I just want to bring that forward. So macroprudential policy and monetary policy have separate objectives and separate instruments, but clearly the exercise of each of them can affect how the other one hits its objectives. So monetary policy can affect risk taking, leverage, maturity transformation, and financial stability. Macroprudential policy in terms of capital, liquidity,

other macroprudential types of tools can affect the business cycle. Now, most of the time these instruments and these tools are going in the same direction, so especially when you have a situation of strong economy and exuberant financial markets you ought to be moving both your monetary policy tools, your interest rate, and your macroprudential tools in the same direction to damp these upswings. And if you've built -- as José pointed out, if you build enough buffer in the upswing, then in the downswing you can have your macroprudential tools also backing off and your monetary policy interest rates declining to try and cushion the downswing. But there can be push-pull kinds of conflicts between them or potential tensions between them particularly in bad times.

Even then, you have different tools aimed at different objectives. And as José was correct to point out, macroprudential tools can free up monetary policy on concentrating on reviving the economy and monetary policy, by easing can free up macroprudential policy to concentrate on rebuilding resilience -- each set of tools, each instrument aimed at what it's best and most efficient at. So macroprudential tools to limit excessive buildup of risk. Monetary policy is a very blunt instrument for this. Monetary policy tools to control the business cycle, to achieve inflation and output objectives. Macroprudential tools are a very inefficient way of doing this. And this would be the first choice -- have the tools aimed at their particular objectives. But problems can arise when one policy is leaning so hard in a particular direction the other can't compensate, can't achieve its objectives. And in these extreme kinds of circumstances, each policy may need to pay more attention to the objectives of the others.

So for example, the example that's often used, very easy monetary policy builds imbalances that may be so large -- that may become so large they can't be

countered by regulation. This is also true for other kinds of policies. Think about housing policy that may encourage housing construction and housing finance in a way that is difficult for regulators to maintain stability there. And I think we can see in the United Kingdom in my role on the Financial Policy Committee on the United Kingdom how useful it is to have an autonomous group, an autonomous voice that can say to the monetary authorities or the governmental authorities you're pushing so far in this direction, we've used our regulatory tools but we think you're creating instabilities, so you have in the United Kingdom for the forward guidance that the Bank of England and the Monetary Policy Committee announced a month or so ago a so-called knockout from the Financial Policy Committee. If the Financial Policy Committee sees stresses building up because of the easy monetary policy it can at least voice that view to the Monetary Policy Committee, and then also the government has given the Financial Policy Committee the authority to put a lock on the help to buy the housing policies that the government has to encourage housing. And they've said to the Financial Policy Committee, if you see excesses building up in the housing sector you can -- after three years you can lock this down. You can stop us from doing this. So I think here is a good example of where there were tools missing and independent authorities missing and the government and the Bank of England have made good use of them.

So there are no easy answers here. I think the first choice is to use the tools for what they're intended, but there are some circumstances in which each policy may need to take account of the others' objectives more explicitly than usual, and in the case of the Financial Policy Committee, the government, the law has given the Financial Policy Committee its first responsibility as financial stability, but subject to that it should

pay attention to growth and the other objectives of the government. It's going to be critical to have communication between the authorities and with the public to build understandings when these interactions happen.

The second topic I wanted to touch on was accountability and governance of macroprudential policy. And I think this is maybe a little tougher than José or the paper acknowledged as I think there are a number of difficulties. And once again, I don't have a quick cure for the difficulties, but I think we need to be aware of them. And I think the accountability for financial stability is difficult. It's a very general kind of objective. It's not easily measured. Mostly we know when it doesn't exist, when there is financial instability, but financial instability can occur with a great lag after its causes have. So I think it's harder in financial stability to do what's done in monetary policy; that is to put very clear measurable objectives out there, delegate it to technocrats, and hold them accountable for hitting those objectives.

So we will still have cycles. People will make mistakes and judgments about the price of assets, the extent to which they can serve as debt. The financial macroprudential policy will not get rid of financial cycles. What macroprudential policy is trying to do is damp the natural procyclicality of the financial system and the amplification mechanisms built into the financial system. Indicators of potential instability and both Charles and José touched on this are very preliminary and tentative. We're still working on a set of indicators to look at to see when financial instability may be building, and as both of them emphasized, the calibration of the tools of macroprudential policy -- capital, liquidity, loan-to-value ratios, whatever those tools are -- the calibration of them to the outcomes is I think still in an infant stage.

And finally, macroprudential policy is likely to have more distinct distributional consequences, clearer winners and losers than monetary policy, and this would apply to both the suppliers and the users of credit. And think about LTV, loan-to-value ratios here and raising them and the effects that would have on households that wanted to borrow as well as institutions that wanted to lend.

So I think that we have a situation in which accountability is more difficult than it is for monetary policy, harder to measure the political pressures. As Charles and José pointed out, could be more intense on macroprudential policy than on monetary policy. So there's a need for independent -- an independent authority to set the macroprudential policy, but then holding that independent authority accountable is going to be more difficult. Once again I don't have easy answers here but I think we need to acknowledge that there are problems.

My final point is one that was not in the paper and not in José's presentation, and I think this is -- how can we get the private sector to help preserve financial stability? How can we strengthen market discipline? This is related to Charles' point about compensation inside the firm. I'm thinking about strengthening financial stability outside the firm.

Now, the private sector by itself can't take full account of the externalities of financial instability. That's why we had to create this separate tool, but I think we can get the private sector to work better with the regulators in enforcing both microprudential, both safety and soundness of individual institutions and safety and soundness of the whole system.

And we need to address two areas to even have a chance at this. One

is the too big, too important, too interconnected to fail kind of issues. So obviously the private sector is not going to discipline itself and the cyclicity in the financial sector if it doesn't feel its funds are at risk. So it is critically important to put creditors at risk, to require creditors to be bailed in in the case of a failure of an institution, and making sure that there's enough bail-inable debt to resolve the institution without endangering the financial system. And having that debt and having it high enough to take account of macroprudential concerns will help to discipline the system.

And the same thing is true -- the same type of thinking for equity capital. So we need high enough capital requirements to greatly reduce systemic risk from too big to fail or other kinds of things, too interconnected to fail. Having sufficiently high capital requirements to put a macroprudential gloss on the microprudential overlay on the microprudential individual institution should bring the private sector into enforcing financial stability, should help to internalize those externalities. Let the market determine how big, how interconnected, what activities these large institutions should have after you take care of making them safe and safe enough to fail.

And a final point on too big to fail is competition policy. I think we need to make sure that there are no unnecessary barriers to entry into the sector. The banking sectors all over the world will become more concentrated. We need to work on making them less concentrated, encouraging competition, encouraging, as Charles said, a diversity of sources of funds both within a sector and between sectors.

The second main thing to work on here if we want more market discipline is transparency. The private sector can't discipline what they can't see or understand. These are complex institutions with opaque instruments on their balance sheets. A

recent focus in this regard has been the risk-weighting of risk-weighted assets. There is a wide disparity among institutions on how they weight and judge the risk of identical assets. It makes it very, very difficult for the private sector, much less the regulators to see where the risk is and exert the right discipline there. So one approach -- I know one approach that we decided to explore the feasibility of is looking at capital on a standardized basis as well as on a risk-weighted -- or using the standardized approach to risk-weighted assets to get comparability and to get better understanding of what's going on in addition to the regular risk-weighting.

And then the final point I think which helps in transparency is the stress test. So conducting stress tests, publishing the results by individual institution will give both the regulators and the markets a better idea of what the strength of the capital is, how much is there to absorb unexpected developments. So I think the stress tests are a very important development. They're mostly used on a microprudential basis now but I think there's great potential for using them on a macroprudential basis for stressing the system in a macroprudential way and for getting information from the response to those stress tests from the banks that will tell us about some of the interconnections in the system that might be points of failure, points of weakness.

So markets will still always be subject to complacency. Externalities will never be priced quite right, but I think we could do a better job of bringing private discipline as part of our macroprudential toolkit.

Thank you.

(Applause)

MR. ELLIOT: Thank you, José, and Charles and Don. I thought that

was an excellent speech and some very interesting comments.

What we're going to do at this point is have some discussion up here about a few questions, and then, of course, we'll turn it over to the audience for your questions.

So if I can start with a question. This is particularly José and Erlend. Do you view the points that you've just walked through and what are in these papers as the consensus of the global policy community? Or are there some points here that you think are relatively controversial where the Fund has a somewhat different view than at least some of the others?

MR. VIÑALS: I think that's an important question and Erlend may add something himself, but I think that our paper tries to be a useful reference for those who are worried about systemic risk, those who would like to prevent financial crisis, and want to get some inspiration in terms of how to go about doing this right. I think there are some controversial issues. I think that perhaps one of the most controversial issues has to do with the specific institutional arrangements that are chosen in order to run microprudential policy. And there we have opted for an approach that looks at different models and tries in another work that we have done and that we have published, look at the pros and cons of different institutional arrangements. But one thing that I believe is particularly controversial is what should be the involvement of the Treasury of the Ministry of Finance. And I think that there are two ways of going about it. One is to keep it at bay in the sense that you think that his may contaminate politically the microprudential policymaking process, and the other is to bring it in because indeed you need the Treasury when you as a macroprudential policymaker wants to discuss policy

recommendations which may affect other policy areas. For example, if you have a country where you have a tax treatment of housing which may be conducive to a housing boom which may be very destabilizing, you may want to have the Treasury around if there are policy recommendations that you may want to make to other authorities from the point of view of the macroprudential authority.

So the question is how to bring the Treasury in, but at the same time make sure that the institutional arrangements are such that the macroprudential policymaker can still operate its tools with professional independence and without this being biased by sort of politics. So I think this is kind of a parallel in terms of monetary policy discussion to the independence of the Central Bank to set the objectives of the independence of the Central Bank to adjust the tools in order to meet those objectives. So I think it's good to have some sort of involvement of the Treasury in the macroprudential policy process, but you have to do it in a careful way. I think that both in the United States and in the case of the UK, those arrangements are careful. I think that in the European Union at large, the European Systemic Risk Board also brings in the word of the European Commission by designating in a careful way and I think that to me this is the most potentially controversial issue. What role should the Treasury have in running or helping to run macroprudential policies? And there are some countries which have come to the conclusion that it's better to keep the Treasury completely out. I don't think that's right. I think the Central Bank should play a leading role but you have some sort of involvement. You need some sort of involvement from the Treasury but it needs to be a careful one so that it doesn't completely politicize the process.

MR. ELLIOTT: Okay. Second question. Do you think we really can

understand systemic risks well enough to set good macroprudential policy? And if so, do we understand them well enough now to be able to do good macroprudential policy? I'll open up that to anyone but José, I'll give you the first shot.

MR. VIÑALS: I think that sometimes systemic risk is very difficult to detect. Sometimes systemic risk may be little bit more obvious. There may be within the context of complex financial system pocket of systemic risk which are hidden and are only revealed at a very late stage and this happened in the United States with the subprime. I think that this was not so easy to detect, but there are other instances where you have systemic risk in a much more patient manner. When you have credit growth, for example, growing at 15, 20 percent per year, when the GDP growth is growing at 5 percent or 3 percent or 2 percent, when at the same time you have very high credit growth relative to GDP, you have a housing boom, you have a current account deficit, you have an appreciating exchange rate, you have tremendous competitions -- tremendous competition of banks to give lending with a lowering of the lending standards. Okay. I think that tells you that there is a problem going on and that you have to adopt some macroprudential policy. So in some cases it's more difficult; in some cases it's not. But I think that what the crisis tells us is that even in those cases when it was very, very visible, you did not have the thinking and the tools and the framework to really do what now you could do with the new institutional framework which exists in the United States, which exists in Britain, and which exists at large in the European Union. So I think that we have come a long way from that situation, although not the full way as I just mentioned.

MR. ELLIOT: Don.

MR. KOHN: So I agree with everything José just said. I think I would add a couple of things. We're in a learning process right now. I think as I mentioned in terms of what indicators you look at, who they relate to these financial cycles, there are a lot of suggestions and I think we're experimenting with them, we're looking at them, we're trying to see, and to some extent these indicators are just an entry point into a deeper dive if you see a problem, if it looks like there's a problem developing in terms of leverage or maturity mismatch or asset prices in a particular sector. I think there are two major challenges in addition to that general one in specific areas, and one is interconnection area. So how do you know how these institutions relate to each other and whether there is a point of common dependence, monoline insurance companies, AIG, that you didn't spot before the crisis began. And I think we're just beginning to develop models and sources of information. And Charles's point about LEIs and trying to classify transactions more clearly I think will help in that regard but that's just the beginning.

And the second, I think, challenging part is the shadow banking system. So institutions that are more lightly regulated outside the commercial banking area, I think we saw in the United States there was a huge buildup of risk there. WE didn't have the information to actually see just how bad it was and how extended it was both in the U.S. and UK, elsewhere, under the Financial Stability Board (FSB). People are spending a lot more time thinking about the risks in the shadow banking system but I think getting the information from these more lightly regulated -- some of the more lightly regulated entities and then spotting the things is very difficult.

And my final point is I think we have to be a little careful about what we expect from macroprudential regulation. As I noted, there's nothing the authorities are

going to be able to do to actually prevent all financial cycles. People get carried away, assets get mispriced, et cetera. I think -- and sometimes people look at macroprudential regulation and say, well, they're going to be able to damp those cycles themselves. They're going to be able to prevent house prices from getting out of line or equity prices from getting out of line. I think we should try, but I'm not very optimistic on that.

But what I am optimistic on is we can make the system more resilient to the inevitable turnaround in those asset prices, and I think that we ought to be able to expect both micro and macroprudential policy to build a much more resilient system even if it doesn't build one in which there aren't any fluctuations in financial markets.

MR. ELLIOTT: For those in the audience who don't follow the issues that closely, this is a key point, the last one that Don raised. There's considerable disagreement in this area about how effective macroprudential policy can dampen down the cycles, while nearly everyone who supports macroprudential policy believes it can be used to make the system more resilient for when the cycle does go the wrong way. So I'll just highlight that.

Charles.

MR. TAYLOR: Yes. I take it I think it's appropriate we should have a sense of modesty about what can be achieved with macroprudential policy, particularly at this stage as both Don and as they have emphasized its early days. And I think looking to the future that will continue to be the case that we'll miss things and we'll spot things late and so on. So the nature of an evolving system is that there are going to be large areas of uncertainty about what the future will hold and you'll identify emergent systemic risks much later on many occasions than you'd like to.

That does put, I think, a premium on us doing this data cleanup work. Getting LEIs in place and thinking about standardization of the language with which we describe financial contracts and instruments and transactions is enormously important because it allows you to get into a position where you can gather data and interpret it quickly in an area where you've suddenly grown interested in. It's very difficult today to respond quickly to an emerging -- a new emerging area of concern because you simply can't get data. It doesn't exist, people don't collect it, and if they do, they don't collect the same thing. They don't mean the same thing by the same words, or different things by different words. So it's a very basic piece of financial housekeeping. It's extraordinary, I think. Again, if you look outside the financial system and look at telecoms or other logistics, other very complicated systems that we've built in our societies, how poorly we've done with standardizing information structures and we really -- this is, I think, a very important step we have to take.

The other point I'd make about macroprudential regulation and the difficulty of knowing how effective it's going to be is that I think it's true in other areas of policy, too, but we have ways of coping with it other than waiting to do more analysis or collect more data. In particular, in the case of monetary policy, although that's not my field and I hesitate to talk about it sandwiched as I am between two experts on the topic, but nonetheless it seems to me that over the last while we've grown accustomed to looking at the impact of monetary policy on a monthly or six-weekly basis, recognizing that because it's operating through a changing system and has a changing system, we can't be completely certain about how effective the individual levers of monetary policy will be. You pull on one; sometimes it will have a major effect and sometimes it will have

a much lesser effect, and you look for confirmation of directional impact and also confirmation for level of impact fairly regularly, and you have the ability to go through a decision loop. A decision loop is, is it what we expected? Is it heading where we want it to go? Do we need to do a little more? Okay, let's try a little bit more.

We don't have that as an established way of operating yet in macroprudential policy or in microprudential policy, and the two were acting hand-in-hand. We probably need to develop a way of being more responsive to sort of continuous change. This will have two effects. I think it'll help policy be more precise in the impact it has. It will also over time get our outside constituents used to the idea that adjustments get made in these policy areas. One of the great difficulties we face with the countercyclical capital buffer, which has been introduced on the Basel III, is when to pull the trigger. And the trigger is envisioned as being an on/off switch, an extraordinarily binary state of the world. And it may be much easier as we think more about macroprudential policies to think of them in gradual or continuous terms and get everybody involved used to policy adjustments being made and looking for suitable policy responses and then further adjustments if needed and so on, and that way I think lies potential improvements in the impact of macroprudential policy.

MR. ELLIOTT: All of your answers have touched on what I was going to ask as my third question anyway, but let me try to ask it more specifically, which is all of you have acknowledged the risks and uncertainties with macroprudential policy. Why should the public let us play with this? Do we actually know enough? How can we show them that there's a reason -- that the benefits outweigh the risks at this point in time?

MR. KOHN: I guess my answer to that is what we're living through. So

we had the deepest recession since the Great Depression, in large measure because of a very bad feedback loop through the financial system, and we are still living with the very unfortunate effects of that in the United States and around -- in many industrial economies of high persistent levels of unemployment and slow growth, et cetera. So I think it's worth doing almost anything we can within reason. There's a cost benefit here but the cost of not doing something and of allowing this to build up are huge. So I think we need to do the experimenting, even if we don't understand and we're just gaining experience or will gain experience over time to Charles's point of these feedback loops and decision mechanisms, but we've got to keep the system more stable, more resilient than it was five years ago, that's for sure.

MR. VIÑALS: I think that, I mean, I very much agree with what Don just said. This reminds me a bit of what happened in the '70s when AIDS exploded and that there was a lot of sort of experimentation in the drug production industry in order to find proper cures. And there was a lot of learning by doing and at the end it was something which was very helpful.

I think that here we already have things which are helpful. I think that given the tremendous economic and social costs of the crisis that we have just suffered, having a perspective which was missing before; that financial stability is important; that you have to have someone in charge; that you have to have some policies, imperfect as they can be, but trying to enhance the resilience of the system. This is something that can be explained. This is something that people should understand. But as I said, one needs to keep the adequate balance between hope and modesty; between being hopeful and being humble. One should manage expectations. We should not overpromise, but

this is something that can make an important contribution.

Let me just mention two specific examples which I think would be very, very relevant. One is the reforms which are now in the way to move bilateral clearing towards central counterparty clearing to provide adequate information to credit repositories. If we can make the derivatives markets over, if we can make the derivatives markets more transparent, this is something that would be a tremendous contribution to the resilience of the overall financial system and this would avoid some of the things that we went through in the case of Lehman or we could have gone through in the case of AIG. So there are some things that already can be done that increase very much the resilience of the financial system. There are other things where there is more room for experimentation, but I think that this is certainly the direction to go.

And the second thing, something that Don mentioned before, is that we need to be equipped with adequate resolution regimes. Institutions in this crisis have been often too big to fail, too complex to fail, and sometimes too big, too complex to be resolved. So having resolution regimes that can allow you to effectively resolve an institution, a financial institution, is something that can reduce tremendously systemic risk. That I think we know, and I think it's more a matter of getting the political agreement for the domestic legal changes and the cross-border sort of cooperation than knowing or not knowing what the impact is going to be. We think that the impact is going to be very favorable, but we need the politics to be on the right side.

MR. ELLIOTT: Charles.

MR. TAYLOR: I agree entirely with the comments that have been made, in particular the thought that this was quite a harrowing experience and anything we can

do to reduce the probability and the severity of any future experiences that isn't too costly is to be welcomed. Again, I come back to this point, I think one of the very first things you do in a situation like this is you try and find out what happened and what's happening. Back to this question of data quality, data consistency, and so on. It sort of goes without saying, I think, that we should be making an enormous effort, probably greater, considerably greater than we are today to put data in the financial system on a firm footing.

Having said that, I think I was asking the question you've asked, and I was not someone close to the financial system. The thing I'd want to hear is why is the financial system different? Because we don't try to stabilize, in fact, many economists would argue we should never try to stabilize different manufacturing markets. So we have experienced that happen nonetheless, but different manufacturing markets, different services markets, we wouldn't dream of stabilizing them. We let them go through very rapid evolution and very substantial destructive (inaudible) cycles.

I suppose the reason -- I could give two or three reasons why. I think that the financial system is inherently built on trust and confidence, and when confidence fails you want it to fail in limited ways. So if you make a bad investment then you lose your confidence in that investment. If an institution performs badly you're going to lose confidence in that institution. But so long as there are alternative paths open within the financial system, confidence failing isn't such a terrible problem, but when it fails for the system as a whole you face a potential collapse.

When a car manufacturer fails, for example, its competitors generally have a better market opportunity than they would have otherwise. There may be

complications about that but generally speaking that would be the case. It's not the case if a large financial institution fails but its competitors are immediately able to take advantage of that and fill in the space that they occupied. It's indeed an issue to do with financial stability that the interconnectivity shouldn't be too high, but today the fact of the matter is that infection is possible, contagion is possible, not just through contractual arrangements and maybe somewhat opaque direct financial connections but also through reputational effect. If you look at how large investment banks failed across the United States in a space of a few months five years ago, it was very largely driven by just the sense that this has happened to one of them, it could happen to any of them. As well as the sense that there was some interconnectivity there.

So failure of products, failure of competitively different and informationalized symmetries are very different, too. So I think it is a unique sector and I think there is a public responsibility to provide stability for this piece of the sort of economic plumbing on which the rest of us depend.

MR. ELLIOTT: Personally, I would just add if we don't explicitly do macroprudential policy, we're implicitly doing a macroprudential policy of never intervening. And I go back to Don's point. I think we found that works very badly.

Erlend, I just want to give you two minutes if there's anything you'd like to say before we take questions from the audience.

MR. NIER: Well, I think much has been said already. I think perhaps the one point I would like to add is that it's really worth thinking about what are the tools that we need as macroprudential policymakers and also what are the mechanisms to ensure that we have the right tools available? And I think there may be perhaps a tendency to

just say, well, Basel III has just come out with a countercyclical capital buffer so that's what we're going to use in the future. I think the fact that systemic risk is multi-dimensions and that you can have buildups of risk in various forms and shapes argues for a broader arsenal of potential tools. And one of the things I particularly like about the arrangements in the United Kingdom is that there is an inbuilt mechanism for the FPC to actually say, look, here's a tool that we're missing today and that we would like to have in the future. So that's a very flexible mechanism to adjust the toolkit as we discover new forms of risk and so on. So I think that flexibility is something that is unusual. I think it's something that we need to get our heads around but I think it's something that we need to really be successful in tackling systemic risks.

MR. ELLIOTT: Thank you.

All right. We'll move on to audience questions. I just have a few requests for you. First, please wait for a microphone before you start your question, and please identify yourself and your organizational affiliation.

Please make sure your question is actually a question, and that it's relevant to our subject today, if you would. Finally, please ask only one question so that we can give everyone a chance to participate.

I'm going to collect questions from two or three people at a time and we'll answer those in batches. So with that said, sir. Sorry, the second row there.

MR. GUHA: Thank you, Doug. Krishna Guha, ex-New York Fed, now with ISI.

I had a question for all the panelists but would like to hear Don's response to this. It seems to me that you could argue based on the criterion set out in

this paper that the U.S. is far from the efficient frontier -- far from having a workable set of arrangements both in terms of the institutional mechanism for decision-making here and also for the kind of discretionary tools that may be needed in a market-based rather than a bank-based financial system. So my question to the panel is do you believe that the U.S. currently has adequate tools for implementing macroprudential policy today? Or is this something that we're in such early stages of constructing that monetary policy will have to carry the weight at least for some considerable period into the future until more is built out here?

MR. ELLIOTT: Thank you. And the young lady here.

MR. PORIN: I'm Prienen Dita Porin and it was a really interesting talk. I've actually addressed many of these issues in some of my academic papers.

I just have one question and it goes to the topic of macroprudential policy as opposed to macroprudential supervision, and I was interested to know what your perspectives were as to whether those two concepts are interchangeable first. And second, the issue of the need to apply a macroprudential perspective to traditional supervision and whether that needs to be distinguished from a macroprudential -- from macroprudential supervision because in my analysis they are actually two very distinct approaches to oversight of the financial system. We have microprudential supervision which focuses on the stability or the soundness of an individual institution, and I don't believe that that's compatible with a macroprudential approach and then we have macroprudential supervision which has as its starting point the overall broader financial system and that we have stability or risk inherent in that and looking to adjusting our approach to individual institutions or to countries from that larger perspective. But I do

have questions, and I've noted on page 13 that you speak of the need for a greater macroprudential approach to supervision, i.e., to traditional supervision, and I was interested in your thoughts as to the need to distinguish that or to probably enhance our understanding on that.

Third, I don't mean to be extremely pessimistic --

MR. ELLIOTT: That's actually probably enough. Thank you. In terms of that.

Yeah, just in the middle back there. I think Sarah is getting you right there.

MR. BRADFORD: Thank you. Colin Bradford from the Global Economy and Development Program at Brookings.

This question is for José Vinãls and it's on the role of the Fund in this crisis. I spent some time earlier this year thinking about the IMF's role as leader of the international communities' response to the crisis. And the question occurred to me and this, as you spelled out the role here in this discussion on macroprudential policy, you described the role of the Fund as being a facilitator, and I think it's certainly clear that the Fund has been a real catalyst in this area along with the FSB. The question I have is does the Fund have the internal objective of being a leader in this area? Part of the question is on global financial risks, who is it that calls out the problem? Who is it that says we have an issue here and takes the lead? It goes beyond facilitating discussion and analysis to actually prompting a response. And I'm sorry to ask this question because I think it's a sensitive one but I think the Fund really has had a leadership role in responding to this crisis and to put itself in just facilitating this effort would be to play less

of a hand than I think it could. Thank you.

MR. ELLIOTT: Okay. Why don't we take these in any order you want.

MR. KOHN: Well, Krishna started with me so let me see if I can try.

I think we don't know, to tell the truth, whether the U.S. has the right institutional structure with FSOC, for example, and an adequate number of tools to deal with the financial system beyond the commercial banking system. I think we're trying. The experience with money market funds was a little discouraging to tell the truth because here's where you had a consensus on FSOC and we're still awaiting action and some of the proposals aren't as strong as -- that are out there from the SEC aren't as strong as many members of FSOC wanted to see them. But there is -- so that's a little disappointing. We're working with the tri-party. The New York Fed is working with the tri-party RP market, so there are a lot of things going on in the securitization and securities area and there is a structure at least for identifying risks and calling for changes, but I think the jury is still out as to whether there are sufficient tools and that can be used and enforced to get the changes that are needed. I wouldn't say no, but I think it's too soon to say yes. So let's see how things develop.

I'll make one small comment on the macroprudential policy and supervision. I think there is -- you're right to make a bit of a differentiation here. If I think about policy in terms of capital, sectoral capital requirements, countercyclical capital buffers, liquidity, et cetera, and supervision in terms of the interaction of the supervisors with the institution, I do think it's not entirely separate and that under Dodd-Frank, but even more broadly, globally, one of the things the Financial Stability Board has called for is an intensification of the supervisory oversight of systemically important institutions. So

I think you're working that -- globally we're working both on the policy side but also on the supervision side to make sure those systemically important institutions at least have tougher supervision, more intense supervision. So I think both are in play.

MR. ELLIOTT: José.

MR. VIÑALS: Two things. One on the macroprudential and the macroprudential supervision, the areas where they coincide. Don just gave one example which is that among the policy recommendations that the FSB is making for how to deal with systemically important banks is one of intensive supervision. But when you are dealing with a globally systemically important bank or a domestic systemically important bank, this is an area where you are applying policies which try to guarantee the health of that individual institution, but also because it's systemic you're trying to guarantee the health of the overall financial system. So there is a close connection between the micro and the macroprudential aspect.

On the role of the Fund, I think the Fund is both a facilitator and a leader. Let's not forget one thing -- that the Fund doesn't have the rulebook as a regulator. This is the role of the FSB and this is the role of the standard setting bodies. So I think that it is important to understand that the Fund cannot lead in that particular aspect because we are not the regulators, the global regulator.

I think we can be a leader, and we have been a leader, and we should continue to be a leader in a number of domains. In terms of world-class analysis of systemic risks at the global level, I think we already are. The Global Financial Stability Report is the leading global publication which highlights, detects, assesses, what is the buildup of systemic risks at the global level. If one looks at the history of the Fund during

the crisis, we were the first to publish estimates of global bank losses basically saying, listen, this crisis is going to have financial implications that go well beyond what many people think. And this is an initial estimate of the losses. We were also pioneers in advocating for serious stress tests and the publication of stress tests in order to introduce transparency and to introduce confidence, of course, on the basis that stress tests should be followed by appropriate action to remedy the problems uncovered by the stress tests. We did make a call for a global fiscal expansion at that time where we thought that a Great Recession was on the verge of becoming a Great Depression, and we also called very early on on European policymakers and European authorities to deal with the insufficient capital of many other banks in Europe. So the leading role of the Fund was there essential in order to avoid worse outcomes.

But I think that as we are not in charge of making the actual policy decisions in EU countries, which is their responsibility, we can simply play a big role in facilitating the analysis, in helping the discussion with countries to provide them with the best advice, with the best technical assistance at the bilateral level so that they can put in place the most appropriate and effective macroprudential policy frameworks. And as an institution which has (inaudible) membership, I think that we are the forum where people come and exchange experiences and we have already started doing this. We had, for example, at the time of our spring meetings, a very important high-level roundtable to discuss the implications of structural constraints of banks -- the Volckers, the Vickers, the Lee Cannon type thing which was very, very effective in bringing new perspectives that up till then were not sufficiently clear to the global policy community. So I think that we can play -- we should continue to play a key role as leaders and as facilitators.

MR. ELLIOTT: Charles, anything you want to add?

MR. TAYLOR: I just add on the discretion of the relationship between macroprudential policy and oversight and microprudential supervision. It's distinct but they're clearly closely related in lots of ways. A couple of ways would be obviously that if you're going to have some kind of a countercyclical policy -- capital buffer, for example -- you've got to do as other speakers have said today, you've got to make sure that when you decide it's time to reduce the size of that capital buffer, that you're not reducing it beyond the point that where there is sufficient capital for the institutions to be stable individually. So you have to have a buffer on top of what is for macroprudential purposes, what is adequate for microprudential purposes. So there is a clear relationship there.

And another area where I think there is a very clear relationship is transparency. So, for example, there was an allusion made to risk-weighted asset studies that we've completed in the Basel Committee over the last nine months, and those have shown up considerable differences in the calculations of risk weightings for assets of different kinds than the banking book or the trading book. And one of the ways that we're exploring for encouraging conversion is to increase disclosure around how these calculations are made. So, for example, comparing published risk-weighted asset calculations with standardized-approach calculations, which would put some pressure on the institutions in question to explain why their calculations require them to hold a lot less capital than the standardized approach would or to show why their risk-weighted asset calculations have changed over time and how. In both cases, you're doing things to increase the stability of individual institutions and to build confidence in the system as a

whole and hopefully thereby increase macroprudential stability.

MR. ELLIOTT: I must say I can't resist answering Krishna's question myself as well because it's a real concern of mine. I don't think the Financial Stability Oversight Council is a good structure for macroprudential policy. So I do worry about that.

Yeah. Most of the way back there. Yeah, sorry.

SPEAKER: Thank you, Doug.

I'm Alex (inaudible) with AICGS. And this is basically a follow-up to Krishna's question because if it's true that the institutional makeup is not able to address these concerns, does it put an extra burden on monetary policy? And how can monetary policy address this question of macroprudential policies when at the same time it's trying to spur growth and it's operating at the zero lower bound? Thank you.

MR. ELLIOTT: Thank you.

Barbara.

MS. MATTHEWS: Good morning. Thank you, Doug. Barbara Matthews with BCM International Regulatory Analytics.

I have a question about the intersection between increased data collection, increased transparency, and macroprudential policy. Charles has made a very eloquent case all day today about the need for better information. I don't think anybody would disagree, but whether you're looking at macroprudential authority that's a collection of regulators internationally or domestically, or you're looking at a single regulator, the fact is that domestically there are very significant legal restrictions on how much information can be shared, either publicly or through confidential regulatory channels.

So my question is I know that the G-20 was looking at this, (inaudible) was looking at this back in I think it was 2009 at St. Andrews. Are you thinking now that it's easier to focus on increased transparency so that there's self-disclosure? Or are you doing any work on the back side of the LEI initiatives to enhance the ability of policymakers to share information internationally?

MR. ELLIOTT: Okay. All the way in that back corner. I'm usually terrible at getting the back so I'll get somebody anyway.

MR. TALLEY: Ian Talley, The Wall Street Journal.

This is for Mr. Kohn. You talked about the need for bail-in for SIFIs and a separate voice -- I don't remember if you used the word "independent," but you talked about a separate voice and the need for -- it's unclear yet whether the institutional framework is sufficient, FSOC. Can you elaborate on those two points? When you talk about the institutional framework, are you saying that potentially within FSOC there needs -- that there's a potential need for strengthening? Or you're saying the actual institution of FSOC is not an independent enough or not a separate enough voice, or something else?

MR. ELLIOTT: Okay. Why don't we take those.

Jose, do you want to start?

MR. VIÑALS: I will leave the question on the role of the FSOC to Doug. But let me just mention something that I said before during the speech, which is that depending on the degree of confidence that you have on the macroprudential authority to do its work, that would imply that monetary policy has more or less room for maneuver in terms of pursuing its final role. So there may be different opinions here but this is the

general principle.

On the issue of data collection, I think that this is a very fundamental thing. And what we have seen is that there are a lot of impediments, both within a particular country but also in terms of sharing cross-border information. There are impediments, for example, in sharing data provided to repositories among different supervisors, but there are also big impediments, for example, in terms of -- or some important impediments in terms of sharing information between home and host authorities, and this is something that needs to be removed and there is nowhere within the Basel Committee and the FSB to enhance international cooperation.

One thing that the financial crisis revealed is that there were huge data gaps. So there has been this global data gaps initiative which the IMF is leading with the collaboration of quite a number of international organizations precisely to identify where these gaps are. And there has already been some significant progress that has been made. And the FSB, as you know, has also this initiative in terms of the global systemically important financial institutions which has envisaged a process of sharing data on institutions, institution basis, or institution (inaudible) basis, which over time is going to enhance transparency. But I think that this is perhaps the Achilles heel of macroprudential policies and even microprudential policies is this issue of data collection and information.

MR. ELLIOTT: Charles.

MR. TAYLOR: Well, there's nothing that José said that I wouldn't agree with. And I think you've covered it in the sense that you raised the question, Barbara, is this a challenge? It certainly is and it hasn't gone away. But the work that's being done

is important. The data gaps project among SIFIs, the broader initiative from the IMF, and improved coordination within the colleges between home and host country authorities, but there are legal impediments to data transfer. There are also, I would say, serious commercial interests at stake in some areas where data is concerned. Data I think one might like in a naïve way to think that it was something of a commons, that data should be freely available but it's very far from freely available. It's the exact opposite. Data in the financial sector is very valuable and is proprietary, and therefore that inhibits data flows to an extraordinary degree. I come back to the point that the one thing you can do or you would think you could do even without sharing the data was at least sharing the language. So it would be a great step forward, I think, if we were to make sure that when a problem was discussed, a certain kind of OTC derivative or certain sort of risk, that a certain kind of very basic things, like sort of the time dimension of financial contract, there was sufficient standardization that you could at least in the language, that you could at least understand how one exposure, one risk compared to another, exposure to another risk across business lines and across institutions, if you could get all of the data. Big problem. We're working on it.

MR. ELLIOTT: Don.

MR. KOHN: So there were a couple questions dealing with the adequacy of FSOC and its relationship to monetary policy. I think the stronger the macroprudential tools, the less pressure on monetary policy to deal with those issues. It's -- I think the jury is still out on FSOC. Whether over time it can develop into a group that can both raise issues -- it's pretty good at that -- but then get the regulatory agencies to act. I mean, the structure of FSOC is just another indication of the very complex

regulatory financial structure that we operate within the U.S. for historic reasons, and I think we don't -- the president is obviously a little frustrated with how rapidly the regulators are moving to implement things. The secretary of the Treasury is a little frustrated, so I think we're finding out whether this complex structure can even given more time come up with the implementations of the laws that Congress passed and come up with good output here. So I would say Doug seems ready to give up on FSOC. I'm not quite there yet. But it's on trial. And it's not just FSOC. FSOC is just the regulatory agency. So can they get their act together enough to really be effective?

The interaction of that with monetary policy, it's clear that the Federal Reserve appropriately has at least an eye on the financial stability aspects of their monetary policy. I think they have to continue to monitor that as they go along. It's a very difficult cost-benefit analysis with respect to the policy and what it's accomplishing and the financial stability aspects. And I'm not going to get into that there, but I agree with the basic thrust, which is the stronger the macroprud tools, the less pressure -- this is a point José made -- the more monetary policy can be free to follow its price stability maximum employment objectives. So we ought to look for ways of strengthening the macroprudential tools.

I think there was a question about bail-in back there. We have to see how this is implemented; that is the Title 2 of Dodd-Frank was resolving complex, systemically important financial institutions. The FDIC has come up with a very promising approach to resolve at the highest -- at the holding company level, use the capital at the holding company level to keep systemically important subsidiaries operating so that the creditors of the holding company are at risk but the financial system isn't, and

we need to see it implemented. We need to have the holding companies have enough bail-inable debt so that this system can be implemented here and in other countries as well. And so I think once again that's a work in process and progress and we haven't seen the endpoint yet.

MR. ELLIOTT: Erlend, anything on any of the six questions? Okay, fair enough.

I'm afraid we've basically run out of time, but José, since you were the keynote speaker, any last words you'd like to make?

MR. VIÑALS: Well, the only last words I would say is that as this discussion has revealed there are still many questions that we will need to answer with adding how to make macroprudential policies work. And I hope that initiatives like the one that you had today and the publication of the report that we have put out today help in moving forward our thinking so that when we meet five years from now we can give some more answers to the questions that were posed today and give answers with more precision.

As I said, I think that we should be very hopeful. There is a lot of learning by doing, but I hope that as time advances we will learn more and be able to make these policies in a way that is more and more conducive to its final goal which is preventing the financial crisis that we have had. Still, we will not be able to fully eradicate financial crisis, so one would need to also develop crisis management frameworks which minimize the costs of crises if and when they occur, but that's another story.

MR. ELLIOTT: Well, actually, I was hoping to have you back in a year, not five years. But we can talk about that later.

Let's thank our panelists.

(Applause)

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