THE BROOKINGS INSTITUTION

LATIN AMERICA'S ECONOMIC FUTURE:
SHIFTING GEARS IN THE AGE OF HEIGHTENED EXPECTATIONS

Washington, D.C.
Friday, April 15, 2011

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P R O C E E D I N G S

MR. CARDENAS: Good morning, everyone. I'm going to ask you to take your seats. There are a few seats available here. I don't know if -- it says "Reserved," but I'm going to assume that they're no longer reserved. So you can take seats here.

Well, thank you, and good morning. I'm Mauricio Cardenas. I'm the Director of the Latin America Initiative here at the Brookings Institution. And we're delighted to host this event this morning, which is our semi-annual presentation of the Brookings Latin America Perspectives Report. This is a report we write together with my good friend and dear colleague Eduardo Levy-Yeyati, who is a non-resident Senior Fellow here at the Brookings Institution. And he's a professor of economics at the Universidad Di Tella in Buenos Aires.

This is our second report, so we are very happy to be presenting this series of analysis on the economic outlook of Latin America. We're doing this on the occasion of the Spring Meetings of the World Bank and the IMF, which have brought to this city a number of distinguished guests.

And to begin this session, we are very honored and very pleased to have Governor Alexandre Tombini. Governor Tombini, as you know, was appointed Governor of the Central Bank of Brazil earlier this year. We're very honored by the fact that this is his first Washington appearance as President of the Central Bank of Brazil, and to have him discuss and make comments about the current economic conditions in the region -- but more particularly in Brazil.

We're delighted that he is with us, although he has a very limited time availability this morning, so he has to go to the G-20 meetings right after he finishes his remarks. So we won't have a Q&A session with him. We will have plenty of time for the debate afterwards with the other presenters and the rest of the session, and then save your questions for that part of the conference.

So -- Governor Tombini, it's an honor, it's a pleasure to have you here.

I think it's important for the audience to know that before being appointed Governor, Alexandre was a Deputy Governor for Financial Regulation, a key issue today. Our central topic in this report is macroprudential policies. Before that he was Deputy Governor for Research, so he was head of the research department. So it's a long career at the Central Bank. He holds a Ph.D. from the University of Illinois.

So, thank you very much, and welcome to Brookings.

MR. TOMBINI: Good morning, everyone. Thank you, Mauricio, for the very kind words. Eduardo, good to see you again. I see many friends here -- old friends -- Teresa, and others.

And it's a pleasure to be in this renowned institution to deliver my views on prospects for Brazil. And some of the issues applied here to Brazil that I will mention, I'm sure could be extended to other economies in the region.

Before going into the more recent developments and prospects for Brazil, I would like to take a step back and say a few things that I think are important to understand where we are today in my country and, to some extent, in the region.

I think we have four areas that we have to pay attention to, in terms of developments -- not too far ago, but which are key to see where we are today.

The first one is that we have now in Brazil, and in many countries in Latin America, a very well tested policy framework. Since 10 years or so, we have implemented a framework in Brazil which combines a monetary policy regime that follows an inflation target strategy. We have also combined to that a floating exchange rate regime. And we have driven our fiscal policy towards the objective of putting our debt-to-GDP ratio in a clear downward trend. And this has been the history, the recent history, of Brazil since the late '90s.

As far as this policy is concerned, this policy framework, I think it's fair to say that it's been tested in many different environments -- some very challenging ones, like the 2002 episode in Brazil, and then during the 2008 world financial crisis. This framework has prevailed, and has worked as an important benchmark for the country in terms of securing macro and financial stability.

Added to that, since 2004, Brazil was able to build up a sizable international reserve position. This has been very instrumental, especially in this latest episode, the 2008 financial crisis. Since late 2006, early 2007, Brazil has enjoyed for the first time in its recent economic history, has enjoyed -- the public sector has enjoyed -- a long position in foreign exchange.

This has turned away one of the problems that we had before, which was this vicious circle that will kick in every time Brazil was faced, or the region was faced, with an adverse international shock, no matter where it was originated. The kind of policy response that we had previous to this new reality was one that we had to, in the wake of a crisis, to adopt very pro-cyclical policies in terms of reassuring markets of the capacity of the public sector to honor its commitments. This time around, the first impact of the 2008 crisis with the country, the fiscal position of the government paradoxically, because of the long position in foreign exchange, improved at the outset of the crisis.

So for the first time in many decades, Brazil was able to face a shock like that with a classical response, a counter-cyclical, a leaning against the wind. And, in terms of adopting supportive macro policies, including monetary policy, we were able to lower interest rates, we were able to implement credit policies to ease the impact on the domestic market. We were able also to expand our fiscal position to respond to that shock.

As I mentioned, we had, at the outset of the 2008 crisis, a $205 billion international reserves level. We had for many years in Brazil-- we thought it was something of a curse -- we had very large reserve requirement deposits at the Central Bank. And this worked as a very important cushion to allow us to implement policies to jump-start our interbank market that was affected by the 2008 crisis. So we were able to, using in a very parsimonious way, both the international cushion and the domestic liquidity cushion, to make sure that exporters had the financing when a sudden stop of capital inflows came in late 2008. And we were able to release considerable amounts of liquidity to make sure that the interbank market resumed its operations, and credit was restarted in Brazil.

So this is part of the story, the first issue that I would like to highlight here, that we have a policy framework capable of allowing us to implement classical counter-cyclical policies in the wake of a shock like that.

The second area which I think is important to highlight is the administration's focus on closing the social gap. So, of course, there was macroeconomic stability, which played a very important part in this story. But there was also targeted policies to close the social gap. And this produced many important results for the Brazilian economy -- including the fact that over 20 million people were raised from below the poverty levels in the last 10 years or so, and we had now a middle class which aggregates to over 35 million people.

Not only did this create opportunities, and it's a good thing on its own, but also, in terms of the policy, it has been very important to make sure that we were able to navigate through very testing times in 2008 and 2009 with a sizable, now, domestic consumption market, which made a difference.

The other area that I would like to point out is the requirements that we have now to rebuild infrastructure and to strengthen infrastructure in Brazil. We have well-known international events. We have the 2014 FIFA World Cup coming up.

We have the Olympic Games in 2016. And we have the off-shore oil fields that need to be developed in the coming years. So this required a well articulated plan to strengthen our infrastructure, economic infrastructure, in the country.

So those are very hard deadlines that we have to meet, and the government is working to make sure that this infrastructure delivery is done on a very sound basis. So we do have these other areas which will influence our policies going forward in the coming years.

The last but not least -- and a very important issue -- is the financial sector. I think a combination of very testing times we had over the many years, Brazilian institutions were very able in dealing with volatility. So this 2008 shock did not come as a surprise for our regulated entities. They are used to working under volatile environments in the past. So this says something about the level of preparedness that they have.

And part of the strength of the financial sector, of course, from -- we understand that it comes from a very strict regulatory, prudential regulatory framework that we have implemented in Brazil of the many years. And also, due to an intense supervision that we have in Brazil.

Just to mention a few things, for instance, we do have registration requirements in our market previous to the crisis that require financial companies to register any trades, including derivatives, over-the-counter transactions. Provided that it involves a financial institution, it is required by our regulation that those trades are registered in a custodian approved by the Central Bank, or by the CVN, the equivalent of the SEC. And this, the regulators have access to that information, and this have been a very important mark of our markets in Brazil.

Also, the many modalities of financial institutions that the Central Bank authorizes are subject to our regulation. There is a homogeneous application of the regulations. Of course there is proportionality in the way we apply to the institutions.

But from credit unions to universal banks, they are subject to an equivalent level of regulation. There are no open spaces to a point that it will introduce regulatory arbitrage as we have seen in other important jurisdictions. So we have the 21 modalities that are authorized by the Central Bank, subject to regulation and supervision by the Central Bank.

And also capital requirements are higher in Brazil, were higher than -- the base minimum were 11 percent since the late ‘90s, and this also has been a deterrent for overexposure for over-leverage in the Brazilian financial markets.

As far as provision of credit, also we have our rulings which incorporate some of the concepts that are now being discussed, which is not only taking into account incurred loss in credit portfolios, but also a hybrid system where you also take into account expected losses, in the way you require provisions from financial institutions.

So these four areas, I think, are important to see where Brazil is. And many other countries in Latin America have also some of these features over the many years to today.

Brazil was one of the least economies to be affected by the 2008-2009 world financial crisis. It was one of the first to exit this period. As I mentioned, we were able to combine macroeconomic policy -- counter-cyclical macroeconomic policy -- with some other initiatives to restart and to restore credit markets and financial conditions.

Coming out of the crisis has been a challenge, because as we all know now, the world has recovered in multiple speeds. And the emerging markets were ahead of the pack, and Brazil was part of this front-running after the 2008-2009 crisis.

The last year was very good results for the Brazilian economy. Brazil grew 7.5 percent, GDP growth in 2010. Demand growth was double-digit. Industrial production, also double-digit growth in 2010. We had record levels of employment. Around 2.5 million jobs were created in 2010. So we had a very strong economy.

And we had demand running ahead of supply, which in 2010 we began to see the emergence of inflationary pressures in Brazil, and we begin to address that issue in 2010. Between April and July 2010, we raised our policy rate by 200 basis-points to moderate and to address the emergence of this issue back then.

We also restored these liquidity levels. We raised back the reserve requirements to the order of anything between 100 billion *reais* to 200 billion were reclaimed, were then now deposited at the Central Bank. So we restored to above pre-crisis levels the liquidity part at the Central Bank.

So we have a situation now where we are still addressing the issue, the emergence of inflation in a world that is growing at different speeds. And these different speeds have produced an extraordinary and unprecedented level of global liquidity. And we are having to deal with that as we speak.

Our view regarding capital inflows of today is that they are -- the sheer size of this global liquidity, which is a result from policies in advanced economies that are still trying to reestablish the economy on a firm recovery path have produced some externalities to countries like Brazil, and we are having to address our inflationary problem in a world of very large and huge capital inflows.

Capital inflows, in our view, are inflationary on those dimensions, and they have the potential of putting at risk financial stability going forward. So it's our duty, as we have a double mandate in the Central Bank not only to secure monetary stability translated into inflation in our inflation targets, converted to our inflation targets, but also to secure financial stability over time.

And to do that, we are addressing the monetary stability. We're in the middle of tightening cycle in Brazil. We are tightening monetary conditions in Brazil. And on the other hand, we are dealing with these direct and indirect effects of these global capital inflows with different instruments. And here, I think, we can say that the macroprudential, the macro-financial policies play a key role.

Capital inflows are inflationary because -- we have seen large capital inflows in Brazil, not as large as what we have seen this first quarter, but we have seen in 2007 and over the years, we have been able to implement a monetary policy, an autonomous monetary policy -- autonomous with respect to the rest of the world. We have been able to implement an inflation target strategy. We have been able to move around our policy instruments. And at the same time, we accumulate flows of capital, building up our reserve position, as I mentioned, since 2004, and sterilizing the monetary effects of this accumulation process.

We have deep financial markets, and we can do that. We can stabilize and put monetary conditions in a position where it's secure in terms of achieving our monetary policy, our inflation targets.

But depending on the size of those inflows, this process of accumulating reserves and stabilizing the monetary impact of these interventions becomes less complete. And what we have seen lately is that a lot of money is left on the table. And this money that is left on the table has provided a burst for credit to growth in Brazil, to growth at a speed which we thought was higher than what would be adequate at this position of the Brazilian economy in the economic cycle. Which means that the economy is moderating, credit growth has to reflect that so we can avoid problems in the future in terms of financial -- implementing policies to secure financial stability going forward.

So what we have are some macroprudential policies to moderate credit growth, credit growth which is to some extent -- 15 or 20 percent -- is funded by external sources, external resources. And so we have, in this area, implemented a few sort of macro-financial, macroprudential policies. And I can name a few of them.

The first was the doubling of capital requirements for financial institutions that want to extend maturities in credit to consumers. So it's okay if you want to extend maturities over and above the life, the accounting life, of the guarantees. You can do that. But it will require that you double the cushion, you double the capital to do that.

Also, personal credit, to extend the maturities, was affected. We required doubling the capital requirement for that.

As far as the external sources of funding, the government has introduced, a few weeks ago, an IOF tax, a 6 percent tax, on borrowing from enterprise, and borrowing from banks, from external sources. And this is an important issue to make sure that these huge capital inflows do not take us into a position where we put in jeopardy financial stability going forward. And also, from a monetary policy perspective, the capital inflows have the potential to undo what the Central Bank does, in terms of tightening monetary conditions. So this was important in that respect.

So I think now, looking forward, Brazil is being addressed as one of the countries that has addressed the problem of inflation with conventional policy. It is one of the front-runners in this respect. We have, since early 2010, we have raised our policy rate by 300 basis points.

I think we have work to do going forward, and we have to be very careful, going forward, to make sure that the surges, the extraordinary levels of liquidity do not compromise our financial stability.

We have seen this issue before. In 2008 there were these perceptions among market participants -- and society in general -- that our real was only one way, was only getting stronger. And this induced very aggressive behavior from Brazilian corporations and individuals that were not only borrowing in foreign exchange, but also were over-leveraging their positions with a view that the real was only getting stronger. Then we had the 2008 shock, and it has produced some meaningful and important repercussions on the real economy in 2008. And we want to make sure that we are preparing ourselves for the exit strategy of the advanced economies that we think one time is going to arrive when monetary and financial conditions begin to normalize in the United States and elsewhere in the advanced economies. So we need to be prepared for that.

In the meantime, we need to address our inflationary pressures. And that's precisely what we are doing. Our took-kit as broadened, not because we are creating a new world, but because of the circumstances that we need to address the direct and indirect impacts of large capital inflows at that point.

But we continue to deliver on our commitment. The Central Bank has made clear that convergence to the center of inflation target, which is 4.5 percent, is going to come in 2012. And to get there, we continue to work towards this object.

In putting things in perspective for Brazil and for the region, things are very good. The region has the natural resources. The region has a well diversified economy. As far as the major financial macro-indicators, we have very manageable debt-to-GDP ratios. We have, as I mentioned, the policy framework that has been tested under very stressful times. And this time around, we believe we're going to be able, using the framework, to get to our secure financial and monetary stability.

In terms of the challenges, medium-term challenges, I think education is one of them that we need to invest, be prepared -- better prepared -- for this global integration. And as far as the issues more directly related to our area, I think we need to develop in Brazil and strengthen our capital markets as alternative sources of long-term financing. A lot has been done lately, but there is room for improvement -- in particular in developing a deep and liquid market for corporate debt. I think this is an issue before us. The amount of requirements that we will have in the coming years to finance infrastructure, I think it's imperative that we develop as we go forward a stronger capital-market base to help finance all these demands.

And also, another issue which is important and will continue to be focused on is to increase and to continue with the process of financial inclusion, which has been a very successful story in Brazil in terms of people having access -- not only to credit, which has been raised from 25 percent of GDP in the early 2000s, to 50 percent of GDP, but also from the other side of the balance sheet, in terms of developing instruments for savings of newcomers to our financial system.

I think this is what I wanted to say here, Mauricio. And I thank you and the Brookings Institution for having me here in this first seminar in Washington, D.C.

Thank you very much. (Applause.)

MR. CARDENAS: Thank you very much.

We're going to move into the presentation of the Report, which is the next 30 minutes.

Those of you that are standing in the back, there are few seats here available, so feel free to take them -- while I find the presentation.

(Recess)

MR. CARDENAS: All right. So let's begin.

Our report basically builds along the lines of what the Governor was mentioning. And the central theme of this particular issue is how to reconcile great expectations regarding Latin America -- great expectations that come from within Latin America and from the outside, which I would just encapsulate in word, which is "optimism" -- while at the same time acknowledging that we live in a very volatile world, and that things can change. And things can change very fast. So how do you reconcile these two realities is essentially what we're trying to do in this report.

Another central theme here is we have to expand the policy toolkit. And we have to be pragmatic. And if anything we've learned, say, during the last two yea after the global recession is that nothing is written in stone, in terms of the macroeconomic policy textbook. So that pragmatism is also, it permeates extensively in this report.

So we're going to split the presentation into two parts. I am going to begin introducing the issues -- essentially, the motivation. And Eduardo is going to look at the taxonomy that we do regarding the policies that are available to countries. And he'll basically conclude, as well.

The first thing is, more than anything, it's a caveat. When we talk about Latin America, we're not really talking about Latin America. And it's important to say that at the beginning.

Because essentially there are at least two Latin Americas. Nothing divides more these two Latin Americas than the balance of payments. There is one Latin America that has huge trade deficits, and there is one Latin America that, until now, has had trade surpluses. They're shrinking, but they're still trade surpluses.

And there are many other ways to differentiate these two Latin Americas, but I think balance of payments, it's a good way to create this division. And, roughly speaking, this corresponds to the division between Central America and the Caribbean, and South America plus Mexico.

But, in practice, we're going to be talking here today essentially about what we call "the Stellar Seven." The "Stellar Seven" are seven countries that are doing relatively well: Mexico, Colombia, Peru, Chile, Brazil, Argentina and Uruguay. And this is the focus of our work.

One aspect that is very characteristic about these LAC-7, or the Stellar Seven, is that they have been subject not just to these trade surpluses, which have been dominated by the expansion in volumes and prices of commodity exports, but also they've been receiving large and very significant amounts of capital inflows. And not just now. They've been doing this for quite a while -- almost a decade, at least, in the case of foreign direct investment. Portfolio flows are more recent. But, essentially, large capital inflows which are taking different shapes and forms, but foreign direct investment still the leading character in that plate.

We hear very often -- and this was the central theme in the conversation a few weeks ago during the annual meetings of the IDB in Calgary, in Canada. It's mentioned by the Managing Director of the IMF, Mr. Strauss-Kahn, that there are signs of overheating in this group of the Stellar Seven. And that's clearly the case. And there are two ways of capturing that. One is that there are inflationary pressures -- that's the most obvious of the symptoms of overheating. But there is also an increase, a very large and fast increase in imports, that is basically reducing the trade surplus.

And as a result of that, of course, central banks -- as we just heard from the Governor of the Bank of Brazil -- are beginning to tighten, are what he said, are in the middle of the tightening phase. The only central bank that has not begun is the central bank of -- the Banco de Mexico. But certainly there is a monetary tightening.

So one way of posing the question of this paper is whether this is enough. Whether this is sufficient to cool down the economies and avoid this overheating. And our main argument is that it is not sufficient.

One central theme is fiscal policy. And what we've looked at is the primary surplus, adjusted for cyclical conditions. And naturally, when you run counter-cyclical fiscal policies, you want to have a large primary surplus when you have good times, like you have now, or you had in 2006 and 2007, prior to the global recession.

And what we're seeing is that the countries were very good at stimulating the economies with fiscal policy, but they have not been so good and so apt at withdrawing the fiscal stimulus after the recession is gone, and after we're not just back to normal times, but after Latin America is experiencing a significant external boom, external positive shocks. And for almost all the countries, primary surpluses are not where they should be, given the current status of the business cycle.

And in part as a result of that, as a result of the two positive external shocks, in terms of trade and capital inflows, our currencies are appreciating. And this is, you know, a very strong upward trend that is not just causing concern everywhere in the region, but is making people ask when is this going to stop?

And it's causing a lot of trouble in many sectors of the economy, especially in manufacturing. And one aspect that we highlight in the report is in terms of employment. The generation of employment is very weak. So currency appreciation is a major concern.

And, of course, this all will look fine, and we can all say, "Well, this is the new equilibrium, this is the new normal for the region. This is something that the region has to adapt to, because these are the new permanent conditions." But the more news comes from China, I think the more we have to be realistic about the fact that China's expansion is not going to last forever. We first heard from no one less than Hu Jintao that China's long-term growth rate is expected to decelerate to 7 percent in the next few years, down from the 9 to 10 percent range. And we also know from many pieces of evidence -- recent papers by Barry Eichengreen, for example -- that once countries reach a certain level of per capita income, the growth rate tends to decelerate. And that is something that can happen in China in about two years.

And more importantly, even if you don't believe in those stories, the intensity in the demand for commodities decreases per unit of output when you reach certain levels of income. So people just don't want to buy more houses, they want to go to restaurants and they want to go to movies. And therefore they require less goods that are intensive in commodities.

So we have to prepare for that. We have to prepare for the deceleration of China, and the decline, as the future markets are already expecting in the prices of commodities.

And, finally, another way to motivate this is that every now and then an investment house puts together a nice acronym to lump together a number of countries, and saying that these are the most promising countries in the developing or emerging world. And we fell into that temptation. We did not find a nice acronym, because there is not a good acronym for what we found, but we found that a number of countries in Latin America are moving up -- and that's very good news.

But also we found that there are some areas in which there is still a big gap in terms of the development process relative to Asia. And the two areas where Latin America is falling behind and we're still, you know, we'll still not at the level of East Asia are growth, stable growth, and also financial resilience. Low levels of leverage, indebtedness, public debt, external debt, et cetera, et cetera.

So this, if anything, is saying, well, if we want to aspire to development, we need to make two things. One, you know, keep the growth momentum at a stable rate. And, two, take opportunity of these current economic conditions to save and reduce our financial vulnerabilities, and make ourselves more resilient in that sense. That's really what's going to put us on the verge of development, and that's what is going to make us really benefit from what we now call the "decade of Latin America."

So that calls for a lot of prudence, and it calls for a number of policies that Eduardo is going to present.

Mr. LEVY-YEYATI: Thank you.

The report, as usual, goes from general to particular. On this occasion, we chose to zoom in on something that's becoming a buzzword in micro-financial discussions, which is this term -- actually, the term that is typically used is "macroprudential policies." And we wanted to dig a little bit deeper there and particularly take the approach of what I think is more popular, although not the approach is given in the literature, which is policies to smooth out capital inflows and exchange rates.

And I need to make this distinction, because if you actually go to the economic literature, and you look up the macrofinancial term, it's typically used as a complement to macrofinancial terms -- you know, in terms of -- sorry, macroprudential terms, in the sense that it looks at systemic exposure of the financial sector, as opposed to idiosyncratic exposure for the financial sector. In other words, macroprudential was a term that became popular after the Asian crisis, where the systemic shocks hit banks that were idiosyncratically very healthy but were, for instance, holding currency imbalances. So the systemic shock essentially showed that, overall, the banking sector was not as healthy as thought.

We are not talking about this particular definition when we are thinking of exchange rate intervention and capital controls. We're thinking a little closer to -- the definition is more similar to what we would include into a counter-cyclical macroeconomic policy. It's a more standard counter-cyclical macroeconomic policy, particularly exchange-rate smoothing policies -- against something that could be defined as a global cycle which is, I think, a key concept that I want to develop a little bit more in this presentation. And we tried to provide some illustrations and some evidence in the report.

So what do we mean by a “global financial cycle?” Or why would we care about changes in the exchange rate that are, from an orthodox point of view, would be essentially, you know, accommodation of the foreign exchange market to changes in what could be defined as an equilibrium real exchange rate. And why not leave the exchange rate adjust to what, in principle is the equilibrium -- equilibrium that can be defined in a circular way as the exchange rate that would arise if nobody is intervening in the market.

Well, here we tried to develop an argument for intervention which is essentially very simple. It is not based on the concept of misalignment, but rather on the -- again, the concept of global financial cycles that are driving this equilibrium real exchange rate.

So let me be more precise. If you ask yourself what are the determinants of this equilibrium exchange rate, and if you look at the orthodox side of the literature -- let’s say this IMF survey of real exchange rate models -- and try to list the key determinants of this equilibrium real exchange rate, we find a bunch of well-known factors -- productivity differentials -- some words respecting economic jargon, trade restrictions, price controls, government consumption -- which are typically very stable over time. So you don’t see the cycle there. You know, productivity differentials move very slowly. So this is not going to change, dramatic changes, in the real effective exchange rate -- sorry, equilibrium real exchange rate.

Now if you look at the last two components, the last two factors, that are typically listed in these surveys, commodity terms of trades and net foreign assets, the truth is that if you look at their evolution during the recent, let’s say recent decade, you see that these are typically very highly synchronized and very cyclical.

So, in a sense, the question here is not whether my exchange rate is currently misaligned. It’s where will my equilibrium real exchange rate be in one or two years? And whether I should brace myself, prepare myself, against sudden changes in the equilibrium exchange rate. It's not that we are trying to force a deviation from equilibriums, we're trying to hedge against a very volatile equilibrium -- right? -- driven by these cyclical variables. And we're trying to, in this section of the report, we're trying to develop a little bit more empirically this argument.

Just an aside, there is also one key driver that is not included in the model but is very visible in the actual evolution of equilibrium real exchange rates, which is the U.S. dollar. Of course, you know, U.S. policy, in particular the trends in the U.S. dollar, are reflected directly in equilibrium real exchange rates. So it's another cyclical factor is behind this equilibrium. The equilibrium is supposed to be an anchor, but it's a moving anchor.

So what we do we mean by lower financial cycle? Well, you know, let me show you just a couple of very simple exercises.

Imagine you take the capital inflows to emerging economies and try to capture, to filter, a common factor -- using some econometric techniques that I will not describe here. I don't want to waste your time with that. But it's very precisely described in the paper, in the report.

And you take a series of these common factors over time, and you do the same thing with changes in the real exchange rate for the same emerging markets. Those are the two lines that you see over there. And these two lines actually explain, for instance in the recent year, almost all of the variability -- the short-term variability -- of both flows and exchange rates.

So, in fact, if you wanted to argue that the exchange rates and flows were actually being driven by country-specific improvements, and a change in the country fundamentals, it would be difficult to do that in light of this data. Because, you know, this thing is happening at the same time all over the emerging universe.

There is something else there. And if you actually pick these trends and try to correlate these trends with the global drivers, you will see that these trends are essentially driven by the U.S. interest rate, risk appetite and commodity prices driven by global demand -- particular demand from the G-7 and China.

So, in a sense, you know, most of the action -- and particularly most of the action in recent years -- has been driven by a few global drivers. Right? If these drivers change -- for instance, if China stops growing at 10 percent and starts growing at 7 percent, you will feel the effect both in flows -- part of these flows will revert -- and in exchange rates.

Now the question is, again, am I happy with just letting this dynamic, you know, move on and play out? Or shall I prepare myself? Try to minimize or reduce or smooth out this volatility you see, particularly in the recent period?

The same happens with commodities. And if we look at it here, and focusing particularly on grains -- which are, you know, probably the most relevant for the region -- and if you look at commodities, they tend to move together. And you can actually extract, again, common trends that explain around 70 to 80 percent of everything that's happening in terms of changes in commodity prices.

Again, if you want to -- let's see if I have -- I don't have it here -- but if you want to correlate these trends over there with a few global drivers, you will find precisely the same global drivers: U.S. interest rate, risk appetite, global demand.

The point is that this global financial cycle, both in commodity terms of trade and in foreign inflows is highly synchronized. So imagine that the interest rate in the U.S., predictably, goes up -- you know, unless they become Japan, ultimately they have to tighten interest rates -- or that China actually goes to a 7 percent growth rate, well this cycle has to be reversed.

So, again, the question is not as much were my exchange rates currently misaligned, it's just where will my exchange rates, real exchange rate, my equilibrium, be in three years? And whether I want to actually prepare for that -- you know, minimize the swing.

Why do I bother about these swings in the equilibrium exchange rate? Imagine that I accept that, you know, if I follow the equilibrium, the exchange rate it will be all over place. Why is that a problem?

Well, you can actually, obviously, use some macroprudential measures to hedge against these movements. And some of these were mentioned by Governor Tombini. You can shield by banking sector, your financial sectors, through micro limits, or taxes, or provision requirements or liquidity ratios.

But you can do that for the financial sector. It's much more difficult to do that for the economic structure, productive structures. So, for instance, if you look at what's going on, or has been going on for the last years, in terms of the industrial versus primary sector dynamics -- and some of these countries have been affected by the exchange rate appreciation. For instance, take the case of Chile -- it's very easy to find incipient signs of what's typically called a "Dutch disease," essentially a situation in which a very productive sector drives up the exchange rate, appreciates the currency at the expense of a less productive sector, typically the manufacturing of (inaudible).

And how do you look at that? Well, here we have four lines. If you look at this one here, this flat line is essentially the net exports of the primary sector in Chile. That means that they are not growing, I mean they're not producing more copper, for instance -- although the dollar income from this volume of net exports is going up with price.

By contrast, if you look at the bottom of the figure, you see this series over here is the net exports of the other sectors, particularly the industrial sector. And you see how this has been coming down in volume. You know, the net export or production of the manufacturing has been coming down recently -- again, at the rhythm of the global cycle. I mean, it recovered a little bit during the recession, as typically it does, and then continues with the downward trend.

The same happened in Brazil. In Brazil it's even more curious, because Brazil was the country in Latin America that had a diversified production of exports, of trade levels. They have a very well diversified export menu. And they still have a trade positive, a trade surplus, in their net manufacturing and exports -- although it has been coming down very steadily over the years.

Now, what's behind that? Because this may be domestic consumption of these industrial outputs. So it may not be such a big problem. But if you look inside these sectors, you will see that the counterpart of this declining net exports are declining industrial shares and declining labor shares in the industry, in the manufacturing sectors. So essentially these sectors are not only not exporting as much, they are not producing as much, and they are ceasing to create the high quality employment employments that the industrial sectors are presumed to create -- right? And, you know, you can see a shift from the industrial sector to services in many of these countries as a counterpart of this incipient "Dutch disease."

So in this light, what have these countries started to do? I mean, the section is called -- it mentions the "Age of Experimentation," in the sense that many of these countries were caught by surprise after the recovery by the sudden resumption, very fast resumption, of capital inflows. And they are reacting defensively. I mean, there is coordination. They're just trying different things to fend off these inflows, while they're trying to keep their monetary policy relatively intact.

And they're trying, as I say, different things. In some cases they are using measures that were old and haven't been used for years -- like, for instance, using reserve requirements as a substitute for interest-rate policy, as in Turkey recently. Or using, you know, ad hoc taxes on particular sectors of the economy so as to short-circuit the effect of this influx on, you know, demand for consumer durables, which is, again, transmission mechanism of the shocks to inflation.

So they are inventing stuff, or they are combining things that were used 20, 25 years ago into a new toolkit that we can call a “prudential macro tool.”

And in this section we tried to order a little bit these measures, because in our view, actually, there are usually two big groups. The first one is obviously direct intervention. And the classical way in which this is put in place is by sterilized spot purchases of dollars by a central bank. Although this has meant a lot of forward intervention which implies, you know, no monetary -- it’s a mutant of a monetary policy, monetary aggregate, so it does need to be sterilized.

But it also includes some -- depending on the country -- measures that go from debt ditherization, for instance, a change in the composition of debt, issuing peso-paper to pay dollar-paper, is usually a way of changing the balance sheet of the country, but also substituting the dollar purchases of the central bank. Exactly the same thing. The central bank sterilized interventions, essentially issuing the peso-paper and exchanging these for the dollar that the foreign investor is bringing into the country. So the treasury actually has taken part in some countries -- in Chile, and to a lesser extent in Brazil.

And then we have another different group. It’s probably more controversial, the one that’s been under heated discussion within the G-20, and particularly around recent products published by the IMF, which is this “signing the will” type of big, broad group -- essentially controls. But not only controls, but a little bit broader than capital controls -- which, instead of buying the inflows and absorbing them, it’s taxing the inflows, trying to keep them away. It’s a different strategy.

And there we have the common tax measures like the IOF in Brazil, we have the unremunerated reserve requirements in Chile. We have quantitative limits, as was the common case in Asia in the ‘90s. This is equivalent to an infinite tax. And then we have macroprudential limits like, you know, limits in foreign exchange positions at banks.

And ultimately, we have something that, although it looks like monetary policy, it could be subsumed in this taxing-the-flows group, which is the use of reserve requirements as a substitute for interest-rate hikes.

How does it work? Well, the typical dynamic of these capital flows is that it's unexpected, that the investor's position itself to get the recovery -- which the interest-rate differential between, say, the *real* and the U.S. dollar. Imagine the U.S. rate is zero -- just to simplify -- the recovery would be given by the real interest rate. What's the real interest rate? It's a passive rate, it's the deposit rate. That's the one that is arbitraged through the forward market. So if I increase reserve requirements, it means that it will be increasing the active, the lending rate, without touching the deposit rate.

So, in a sense, I can tighten the economy, contract monetary aggregate, by taxing the banks because the reserve requirement is, in a sense, a tax on financial intermediation, without making my currency more appealing, without having to suffer the so-called "off-set" effect, you know, of capital coming back because now the interest rate is higher and the carry is higher, as well.

So, anyway, we have this taxonomy. We have a table that I'm not going to go over, because we don't have time, and you can barely read. But this table in the report actually lists the recent applications of each of these particular intervention measures, or items or lines that I described before.

And you see that there is a wide variety, and some of these countries are actually intervening in many alternative ways at the same time.

Now, the next question is, if we accept that we have intervened, and we take this taxonomy that was described, whether this works. And, again, this is a point of controversy. Because some people typically will just think of capital controls -- people's reaction is that it's not only they're terribly damaging, but also completely useless. Which is obviously a contraction. They are either damaging or useless. But if they don't do anything, then it can't be damaging.

Now, the question is whether they do something, or it's just, you know, fireworks that create distortions without any meaningful effect. How can you measure that?

One way to measure this is essentially trying to correlate the real effect of exchange rate measuring in alternative ways, with some measure of interventions -- essentially the changing reserves, in this case, normalized by the monetary values -- essentially the fire-power of the central bank intervention in terms of monetary aggregates.

And if you run the regressions -- of course, there are many more variables included here -- but if you go to the bottom line of this exercise, you see that intervention actually has a positive effect on the real exchange rate. The real effective exchange rate here is in (inaudible) case. So it's also positive. And either if you measure this by adjusting for purchasing power, or in terms of, for instance, the real effective exchange rate that the IMF computes regularly. And you have, actually, a lasting effect. Because if you measure this over three-year periods you still find that the central bank dollar purchases depreciates the currency.

Now, how much -- you know, this is, in fact, important. Because typically, (inaudible) very little, economically very little, effect. And if you actually do the math, and try to put a size on this intervention, essentially if you increase by 10 percent your reserves over M2 ratio, if you intervene at the moderate base, you may get 3 to 4 percent depreciation of your currency -- which is not zero, very small.

What about -- I lost one slide -- what about the capital controls? Well, again, you can actually measure the difference between the effect of capital controls by measuring the difference between the interest rate differential on the one hand, and whatever you get in the forward market, on the other. Essentially, the difference between the wedge that you gain by using capital controls, instead of raising interest rates without getting a countervailing capital inflow.

And this has been done many times, including a long time ago in Chile, for instance, during one of the first showings of this Chilean type of controls, by a couple of researchers -- one of which will be here in a moment -- which is Jose de Gregorio, current Governor of the Central Bank of Brazil.

And they found that, in fact, you created a wedge, a difference, between, you know, the forward discount and the interest rate differential. You created a chance to raise the interest rate by a certain amount without having to face additional capital inflows. That's what they were measuring. And this wedge was around 2, 2.5 percent, which was essentially the level of the tax. That makes sense. If you tax inflows by 2 percent, you will get a depreciation of 2 percent.

Is it important? No. It's very small. If you really want to get 30 percent, a 30 percent depreciation, you have to tax, then, not exactly, but close to 30 percent.

So, in a sense, the bottom line of his analysis is that these exchange-rate smoothing policies are not as powerful, nor as useless as typically, you know, skeptics or promoters claim. And, more importantly, I think they're not enough -- and I think, at this point, particularly after hearing, listening to Governor Tombini and the talk that we had before getting into the session -- I think that none of these policies, alone -- the fiscal policy and monetary policy, as Mauricio mentioned -- or these prudential macro policies can actually revert the global financial cycle that's affecting these countries.

They have to used orderly, as a single prudential macro counter-cyclical, macro toolkit. And even in that case, the only thing you could get, essentially, a smoothing out, but not reverting these flows.

So that's sort of the perspective we wanted to give in the report.

I think I will stop here.

MR. CARDENAS: All right. So, of course, we're running a little bit behind schedule.

So I'm going to invite the two panelists, Jose Luis and Piero, to join us.

So we have two invited discussants, and participants on the panel, representing the views from the markets.

Peiro Ghezzi, who is Managing Director, and is the head of Economics and Emerging Markets Research at Barclays, Ph.D. in economics from U.C. Berkeley. Peruvian, he worked at the Ministry of Finance in Peru at one point. He was at Deutsche Bank before.

And Jose Luis Escriva, also a very good friend. Until quite recently, head of research, Global Research, at BBVA, the global bank, the global Spanish bank. Now the director of Global Public Finance at BBVA.

So I don't know who is going to start. Do you want to begin? Great. Whatever.

MR. GHEZZI: It's working now? No? Yes? Okay.

Thanks very much, Mauricio and Eduardo for the invitation. I really enjoyed both the paper and the presentation.

Let me just make a few comments on the issues that I think are worth discussing.

I think the introduction quite properly talks about, highlights the failure of fiscal policy -- right? -- of moving from, of adjusting now that Latin America has moved from a recession to overheating and inflation -- right? And they also correctly mention that the issue is not fiscal sustainability anymore -- right? The issue is just business cycle adjustment in Latin America.

But I just wonder to what extent we are discussing a lot of this new policy toolkit just because fiscal policy is not doing enough. To what extent -- if we think of fiscal policy as being extremely out of whack with the business cycle and with economic reality, really we should not be needing all of this heavy lifting from the central banks. So I feel like to one extent, that's the first comment I'd like to make.

The second is about the role of credit -- right? I think like if the real issue is financial stability, it probably would be useful to see to what extent the different tools that we are discussing actually are effective in reducing trade that seems to be growing so rapidly in a few of these countries. I think, like you, it would be very nice to discuss, now or later, about how the different measures really affect one of the key variables that matter.

On the Dutch disease, I realize the taxonomy between, you know, like financial Dutch disease and the more of the typical traditional Dutch disease. And clearly, let's say, countries like Argentina benefit a lot more of the traditional Dutch disease, or bad effects is more (inaudible) than it is with other countries like Peru or Brazil, are getting a lot of both.

I think the distinction is a lot blurrier than what is in the paper -- right? I mean, it's a very useful and nice taxonomy, but at the end of the day, the truth is that some countries with very unstable legal frameworks -- right? -- with not always property rights are actually receiving less SDI. And a lot of the SDI that some countries are receiving, like Brazil, Peru, Colombia, are because of the commodity prices, as well. So I feel like there is a lot of -- both are together.

And, now, Mauricio mentioned something in the presentation -- right? -- about what if China slows down to 7 percent? I mean, like, that can happen. I mean, I think the most likely scenario is that China will not be growing at 10 percent in the medium term. But it's notorious to me that the natural implication of that is that commodity prices are going to have a large correction downwards.

I think, like, we did some analysis in Barclays once a year. We take some time and do something -- we take more time than usual and do like something with longer shelf-life. And we produce something called the "Equity Gilt Study." And what we did there is try to analyze, let's say, the long-term structural determinants of commodity prices.

And what we found out there is that, really, the supply-demand imbalance is gigantic. So even if China slows down, it's not obvious to us that you are going to see a correction in commodity prices.

And, now, if we assume that there is a little bit of a permanent component -- right? -- and I think we need to believe there's something permanent to increasing commodity prices. It's not just financial speculation -- right? Obviously, financial speculation exacerbates the cycles. But there's something more structural -- right? I mean, we have seen the global recovery has not been as strong as to justify the increased commodity prices.

So if we believe there is at least a permanent component in commodity prices, is it that bad that the manufacturing sector has to adjust? At least to a certain extent? I think probably we need to make a distinction between more of the temporary and, let's say, the policy you would like to do under temporary conditions, and under cyclical changes in commodity prices.

Moving on to the effectiveness of FX intervention, I think that authors obviously -- Mauricio and Eduardo -- write the idea that it's so difficult to measure equilibrium exchange rates, that probably it's useful to say it's whatever prevails -- right? -- on the current fundamentals if there is no intervention.

Now, they also distinguish between policy concerns about, let's say, the level of exchange rate, and the risk that the exchange rate is reversed down the line because fundamentals change -- right? Because commodity prices collapse, or capital flows spurt.

Now, I'm not truly convinced -- obviously, it makes a lot more sense to talk about smoothing effects intervention. But I'm not totally convinced that central banks don't care about the level -- right? I mean, it's obviously -- it's easy to justify, "I really care much more about volatility, but I don't target a certain level."

But, if you know, they -- I think, like, we need to care. I mean, like, there is a reason to care about appreciation at the end -- say policy makers and politicians respond to your constituencies. It makes sense to care about, you know, what the industrialists in Sao Paolo think about the exchange rate. So at the end of the day, I believe that there may be -- I mean, like, even though we are talking about smoothing volatility, there may be a reason to believe that there may be something more in the minds of central bankers. And then this intertemporal optimization discussion may not -- you know, it may not be the right point for this -- right?

Now, obviously, I think I have to agree with the fact that the markets overshoot. I'm not sure if central banks know more than the markets -- right? I am willing to give that, as well. But, I mean, at least it would be nice to discuss further that. So if that's the case, you know, what would be the optimal policy tools that we would like to utilize.

Just a couple of more things.

On the effects -- I lost -- on the effectiveness of intervention -- right? -- I think there are like nothing against the rules -- right? Obviously. But, I mean, we have had so many countries that have intervened -- and use Peru as an example. I mean, I think it would be nice to have seen more of a development of the Brazil example, or Chile, or other countries that have intervened.

Peru is very unique -- right? I mean, the Central Bank has so much control of the banking system in general, the Chinese would be ashamed. So, to what extent to use it as an example, I'm not sure it really characterizes that.

Second thing -- on the -- I think it's not in this paper. You mentioned it. You really say that the cost of depreciation really is very small. You know, I'm not sure. I mean, I didn't see the previous paper, so it's difficult for me to understand.

But I would say two things. Clearly, even if it was small, it should be increasing to the extent that the tariff, or the interest-rate differential, everybody is tightening, whereas the U.S. doesn't appear to be tightening anytime soon. So at least in that respect, the cost of depreciation has to be moving higher.

Second, there is this very nice idea -- but I think it's an idea that made more sense five years ago -- that more reserves reduces the country's risk premium. I mean, if Brazil adds one additional billion dollars of reserves, I can tell you that the CDS doesn't go down by one basis point. At this point, it doesn't matter. That was the story in 2004, 2005, when we really were concerned about, you know, like the cushion that countries would have.

But at this point, an additional billion dollars of reserves in Brazil, or Peru, or Chile are not going to do a lot.

Now, on the effectiveness of stopping influx, I actually am going to take issue with the idea that capital controls -- in certain cases, at least -- cannot be both -- the word that Eduardo used was "damaging and useless at the same time." Okay? You're like supposed to be a contradiction. And I can see how it can be seen, in general -- right?

I think, like, I fully agree. I mean, like, it's natural to see a gap between the on-shore and the off-shore interest rate, and between on-shore and off-shore prices in the press of capital contracts. That's natural to see.

Now, I think Eduardo and Mauricio also implied that that naturally maps into also, you know, like, an effect on the exchange rate. And that gap, I don't think -- you know, like, likely will follow, but I don't think necessarily follows.

Imagine you have a tax -- right? -- for the sake of an example, you have a tax, an IOF tax of 10 percent -- right? -- on an IPO in Brazil -- right? Foreign investors are the buyers of this IPO, and suddenly there is a 10 percent tax.

So what probably happens in that case is the domestic price of the company falls by 10 percent -- okay? That's a theoretically reasonable assumption. If that happens, your net after-tax price is the same. And the economics of actually investing in the company do not change for a foreign investor.

So the flows do not necessarily change, and the FX doesn't necessarily change. So, in other words, to a certain extent, the more, the larger the effects on asset prices, the less that your FX cost-adjusts.

So, obviously, no two cases -- I mean, I'm not saying that this is true all the time, but as I said, you can think of cases where the adjustment actually happens through asset prices. Economics do not change for an investor. And, actually capital flows, and then the FX adjusts. So there is both a tradeoff between the asset-price adjustment and the FX adjustment.

So, for long-duration assets -- right? -- or for equities -- right? -- where foreign investors are biggest holders of those assets, actually you do have a cost, which is the lower price of the asset, higher interest rate. And it's useless, to the extent that the FX actually does not depreciate.

So I think that you can construct, at least theoretically, that I don't think crazy, crazy, where you actually can see both useless and damaging capital interventions.

And the other thing is that typically, criticism of capital inflows -- I'm not going to defend Washington policies or anything like that, but obviously if you have close substitutes, even if there is a wedge in the interest rates on-shore and off-shore, you can always circumvent those and, you know, it's not obvious that assets are going to escape, and FX is going to really depreciate.

One more thing -- two more things, right? One on -- you told me 10 minutes, 10, 15 minutes, right?

Two more things. First, on reserve requirements, I think -- like Eduardo developed it here in the presentation, it wasn't obvious in the piece -- I think it's very interesting to start understanding what are the different implications of imposition of reserve requirements over, you know, interest rates. Right? I think it's not exactly the same.

I can see how certain governments actually are -- like Peru, for example -- are increasing reserve requirements that actually reduce the carry for investors, right?, and tighten monetary conditions. I don't think it's such an obvious trend in emerging markets. I think, like, you have seen it in Turkey, for sure. And Brazil, Peru. Asia actually is going the other way. Like, China actually is using more interest-rate policy.

So I think, you know, I think it's very interesting to see -- there's a couple of papers by Woodford also -- right? -- discussing how you expand your IS-LM framework, thinking about the sort of different rates.

And, finally -- and just one more thing -- you know, like, the Peruvian chapter, the Peruvian chapter has -- I mean, the title is called, "An Unusually Calm Election" -- right? So I could not -- (laughter) -- I could not -- and nobody saw it, so I'm not going to blame Lucha on this, right?

No, but what I wanted to say is that -- but I wanted to bring something else, right? You know, like, I totally with the idea that it is probably very premature to talk about that this is going to be the Latin America decade, right? It's really not obvious that this is a "Mexican decade." Nothing has happened in Mexico to support that it's going to be "the Mexican decade." It's not obviously the Argentinian and Venezuelan and Ecuadorian or Bolivian decades -- right? There is at least a 50 percent probability that a Bolivarian wins the elections in Peru a few weeks from now

-- right? Then you are left -- and Chile is unique. It has always been unique, so I don't think it's that different this time than in the past. So in the end, you are down to Colombia and Brazil.

And I think what has happened in Peru, I think I find it particularly interesting, right? You have a country that not only has grown -- right? -- at 8 percent per year, has been among the top five performers over the last five years. It has reduced poverty from 54 to 34 percent in four years. And you have not included 2010. So it probably was to 30 percent -- more than 20 percentage points, more than 20 percentage points reduction of poverty.

And then you have two anti-systemic candidates getting 56 percent of the votes, right? You have -- Humala is obviously against the economic system, but Fujimori is against the political system. So you have a huge case there to make of something else, something is going wrong.

Obviously, the specificity is to Peru. The lack of political parties obviously makes the elections much more volatile, much more fragmented. And leadership a lot more, you know, like you originate political leaders as opposed to a party.

But I think other countries, Colombia, have seen also certain destruction to institutions. You know, like, less obvious political parties. There are other issues going on in Colombia, like security, have been overriding issues. But looking forward, I think we are pretty, pretty -- we should be conservative before declaring victory, and believing that this is the Latin American decade. I think we really need to think twice.

That's it. Thank you very much.

MR. CARDENAS: Thank you, Piero. Thank you.

On that optimistic note -- (laughter) -- Jose Luis, you have about 10, 15 minutes.

MR. ESCRIVÁ: Okay, thank you. First of all, I would like to say that I liked the report very, very much. I tend to agree with the premise of the report on policy recommendation and also on the assessment on how to deal with a situation which is going to prevail on the macro side in the years to come, which is rather complex in terms of macro management. Because this is -- I mean, if we tend to envisage what is going to be the most likely scenario in the years to come, I would say that it might not be for very much what we have seen in 2010 or what is happening now. I tend to believe first that it's going to be a scenario with very, very low -- probably lower than what markets are expecting now, that's at least my view. This is going to continue giving rise to very abundant liquidity in Latin American countries, and also continue accepting pressure downward on risk premiums that to me would move to write too low a premium, too low a price of risk. This is the first ingredient.

The second ingredient is high commodity prices. There seems to be consensus. I think that again here the downside scenario looks very unlikely. We are in a very, very long cycle of high commodity prices. And even if you take a very, very long view, prices, actual real commodity prices, it doesn't seem to be so high, particularly I'll say for food and even for some metals, always much more complex to get. So this is the second element that is going to be present in the region in the years to come.

The third is what is going to be the policy mix prevailing? Okay, well we have what we are witnessing so far is overall, I would say, an economy that stands which might not follow the advance in the cycle. We are witnessing a resistance to a fiscal policy to the level that the cycle requires, but we are given the limits that the policy because of the exchange rate appreciation and the problems in the sterile front. So fiscal policies in the region should be tied already and should go further in the years to come. And I doubt this is going to be the case. Hopefully it is, but in my centralist scenario, I would tend to believe that they are going to fall below. It should be near it.

Here as always when talking about Latin America -- sorry, I should have mentioned from the outset -- certainly there are different centralist countries. What I say maybe not political for some countries, only partly, but I'm trying to depict a whole picture for the region which as usual is very difficult because it's -- but, okay, I think for the sake of this presentation, it will continue this way. So I would say, fiscal -- there is going to be also a level of resistance to an exchange rate appreciation. To me, more appreciation should be allowed. I know this is still a tricky issue, but in a way it's going to be unavoidable. But the fact that the exchange rate, these attempts of intention, this creates an even more abundant liquidity situation.

The fourth element, I think, in the picture will be, I would say, limited progress on fiscal reforms. So expansion of the potential output will not go as far as probably desirable. What we can see so far -- I mean, Mexico has been mentioned, I think is a case in point. I mean, if we -- I mean, I, too -- a period of nearly 12 years with governments, the expectation then was very, very highly prone towards reforms. I mean, the political constraint had been huge, and finally the outcome is to see it at most a middle-of-the-road approach to far-reaching reforms. I mean, that's the way I would put it. But this can be substituted to other countries in the region. Let's see, there are governments entering with very old attitudes, but at the end of the day, political constraints. They need to force minorities in a country. The lack of consensus in the society and the political elites about the desirability of, let's say, micro reforms, it's a major problem in the region.

So if we combine these four elements, this external environment at very low rates, with risk premiums narrowing down further in the region, high commodity prices, this policy mix I mentioned plus this almost limited advance in the expansion of the output in a structural manner, I mean, the key -- what we are going to see in the region in the years to come is very overheated economies. I mean, it seems to me that this is unavoidable.

How is this overheating going to be reflected? My impression is that, unlike what others think, we are not going to see major inflation with some exceptions. Something we have learned in monetary policy over the last 20 years, I would say, is probably the most important thing to me is that the anchoring of inflation expectation at a certain level is extremely powerful. And what we see already in the region at different levels we might discover is already a fragile stability, I don't know, but when you remove the transient elements of inflation, what you see in most countries in the region, with not all exceptions, of course, but we would say the most affluent countries in the region, you see inflation stabilizing at decent levels consistently already for nearly a decade here and there, even longer for some periods. I think this anchoring is going to work with the current shocks far more than people expect. But the abundant liquidity will be there, overall macro policies are going to be lax, so I think that what we are going to have is asset bubbles. Where and when is difficult to guess, but the conditions are there to have such elements in the region. Major real estate, other asset classes, but that's to me going to be the way all this liquidity, all this excess liquidity, all this lax conditions are going to be channeled through the economy, not entirely in headline inflation. I mean, that's something I think we have learned from various episodes in countries over the last few years.

Against this background, I would say the situation is going to be very challenging for policymakers in the region. On the fiscal front, I think that there is a need -- we have seen this in Europe very clearly -- that in the periods of boom, I mean, you really need to go much further on fiscal consolidation that you tend to believe. There is a tendency to over appreciate transient revenues which did not prove to be as structurally there when the downturn comes. I mean, this is -- and in the region, I tend to believe that this is going to be the case again. So I think it's going to be very tough. There are already signs that the current stance in the fiscal front is not tight enough, but this is going to be a challenge in the years to come.

On the more tight policy, since -- I might be wrong, but if I am right I think inflation doesn't move outwards as now as suspected by markets or by central banks, there are going to be some limits to the increasing their rates, all the more given that the exchange rate appreciation will continue and will be a level of resistance. So at the end of the day, we might see a very strong credit growth. A very strong credit growth is going to be something which we are already witnessing, more in some countries than others, but that's something that's going to be fast. And this is going to be a key policy -- you're going to give rise to key policy items.

My impression is that all that we are witnessing now with this macro -- the discussion in the paper I think is very interesting on macroprudential measures on the external front. My view here is that -- but I think the discussion maybe next year is going to be on macroprudential measures now or let's say not market-oriented measures on the domestic front. As we have seen in Asia and other countries, this is going to be the new issue probably for the next year's discussion.

But, okay, briefly on what is in the paper, I tend to agree. To me, we have to be very pragmatic on the issues of interventions or let's say not market mechanisms to avoid appreciation. They should be kept as they work. As soon as you see distortions or severe distortions, you should be prepared to remove it, not be particularly fond of anything and limited expectations about their power, I tend to agree. This allows us to move smooth out the exchange rate path, but don't expect that you have found something magic that is going to work all the time and in all circumstances. Basically what you have to do is to introduce two-way risk in the market to the extent not only you are making more expensive some positions, but I think it's also important that markets are sometimes uncertain about their -- how these measures are going to work, and this is a way of introducing two-way risk in the exchange rate market when people are in a one-way bit mood. So I think that may work.

My expectations, I think, of your view are limited, but should be tested. I mean, I'm not particularly pragmatic here, but to me the major challenge because here we are talking about the major change going to be on the domestic front. The situation looks already, as I said, in some countries as even more advanced than I had expected on overheating. Current account deficits are widening. You see a lot of presence already on some sectors. So I think that credit is going to continue growing very fast. I hear the region sooner or later needs to test what Asia has done in terms of not market driven. I think there are not a lot of alternatives unless they are really prepared to embark on a very, very tight fiscal policy, that would be my choice, but I think it's not going -- I understand it -- it's not this year at all. And also infrastructure deficit, I mean, when you look at the issue you see how complex it is. But that said, I think you will need to test Asian-type macro measures, not market driven. Are they going to work? I don't know. This is not Asia. Latin America is not Asia. When we have tried in developed countries some of these measures, I mean, it's much more difficult. We have a far more advanced financial system and lesser related than in Asia, much more openness of the financial account. Seems to me that this is still something to be tested, but it's going to be unavoidable because the region is going to be subjected to huge pressure in the years to come.

And just one word on the long term, on the long term, I think that for the next three or four years are decisive in order to do a number of things to be able to expand this potential output. And here I think that infrastructures -- I mean, there are already capacity constraints which are visible in some countries on infrastructure, on human capital, on transportation, where unless decisive measures are taken in the next few years, we take a huge bubble of the private sector with an environment which is really conducive to bring a private sector with public money because of the fiscal consolidation more ahead is going to be more difficult. We may not be able to grasp this opportunity for a quantum leap to, let's say, levels of income per capita above $15,000, on average of $15,000.

MR. CÁRDENAS: Well, thank you very much. I think we have 15 minutes before we move into the next segment where we're going to hear the Minister of Finance of the Republic of Colombia and the Governor of the Central Bank of Chile, so I encourage you to participate at this point. I see Piero Ghezzi, Arturo Porzecanski, so please make your comments or questions as briefly as possible. There is a microphone somewhere. I just saw someone running out. I don't think it was -- oh, yeah.

SPEAKER: My main question for the report was why you didn't include into the toolkit the macroprudential financial regulation because that, in my view, theoretically at least, could be an additional toolkit, not just for financial stability for avoiding the financial risk of these credit booms. But you can help me to get the cycle and the consumption cycle and the current account cycle and the real exchange rate cycle as well. So I think that an evaluation of a new toolkit, which I agree, I think countries should do as much as they can. Sensible, but use all these instruments as much as they can. I think there is a real important issue behind this, even if it lasts for a couple of decades.

But saying that, I think we should look at actual experience with this mechanism. There are three countries that already have had these macroprudential financial regulations: Spain, and more recently Peru and Colombia, and it could be useful to see what happened in the past cycle with this. I have seen mixed evaluations with Spain, with the Spanish case, so my question is to José Luis, it seems that it was working and suddenly it was relaxed in the worst moment so in the end it was not so useful, but that's a question.

I have seen a recent paper evaluating the case of Peru that seems to be a big help in smoothing somehow the credit growth in the last cycle and probably the

Colombian case was too soon. So my question is what evidence is there on that because I do think that it is something that we should add to the toolkit definitely.

MR. CÁRDENAS: Thank you, Piero. Arturo?

MR. PORZECANSKI: Yes, Arturo Porzecanski from American University. Okay, thank you. Yeah, I just wanted to emphasize the points that José Luis and Piero made. I think that we are witnessing a major failure of fiscal responsibility in Latin America. And I don't think that the paper really comes out sharp enough on this. In some of the country chapters it's mentioned, but I mean, consider a few things. First of all, we just had the Central Bank President of Brazil speaking and he didn't even utter the words "fiscal policy," never mind characterize it. I have a feeling that he would have nothing good to say, that's why.

Second, when even Chile abandons its fiscal rule -- and this is two and a half years after the onset of the financial crisis -- and there are no plans to bring it back and there are structural fiscal deficits for as long as the eye can see and the central bank is left alone, having to tighten liquidity to deal with the coming overheating, you know there is a problem because we're not just talking about the Venezuelas, Argentinas, and Ecuadors of this country. There is a big problem, and I think it's a lot easier both for economists and for policymakers to discuss putting on a tax on foreign capital inflows than dealing with the real problem, which is the growth, out-of-control growth of government spending.

MR. CÁRDENAS: Thank you. Anyone else? You going to begin your talk? So, José Oriol.

MR. ORIOL: This is for Piero. I think that Piero made a very good point that has baffled me for a long time. He said "Well, in Peru, that's his opinion." There are too systemic -- well, they're going in circle rounds, so there is no way out. Now I think that truly, can't this become serious when changes in the political condition do not derail stability? So the change in Brazil became stable when Lula was President. So this is the thing that Chile became very stable when after the return to democracy, free market economy prevailed and macro economy stability. So I think that's a key, so perhaps regardless of what you think about your preferences, I think that this is the real test perhaps. And from here we'll have breakthrough for very long time despite whatever happening in politics.

MR. CÁRDENAS: Thank you. And in defense of what's written in the report, that the section on Peru was written by Luis Carranza, I think when he says that the elections have been unusually dull, it's not about the cast of characters, it is about the topics of the discussion. I don't know if you saw the presidential debates. I did see them. And in the presidential debates, they all agree on the same programs. Whatever was proposed, they all agreed. It was a wide consensus. So dull in terms of ideas, not so dull in terms of who's running.

Yes, you had a question?

SPEAKER: Yeah, just a comment about José Luis about low real commodity prices. They're at record levels since the early '70s. Corn was $8.00/bushel last week. France is hosting a G-20 and that's as far as I can see at the top of the agenda of what we're going to do about that. Which brings me to Chapter 2 which argues that high food commodity prices are due to liquidity, low U.S. exchange rates, speculation, growth in demand from Asia. But if you look at the data carefully now in recent studies coming out, Asia's been the net exporter of food grains and there's been no shock in demand or supply in the food grains causing the 2007-2008 and now again high food commodity prices. The exchange rate has been moderate and the speculation has also shown not to be affected. The key shock that's caused low stocks-to-use-ratio that led us the 2007-2008 food commodity prices has been one source, and that's been biofuels from rich countries' policies of subsidizing them, having high-import tariffs. And that has been the primary reason, not shocks in demand or supply from Asia or anywhere else, or speculation for that matter. And why is that important for Latin America is because if we didn't have these silly protectionist policies in Europe, Canada, the United States, and elsewhere for biofuels, it would be produced -- ethanol would be produced in developing countries and have a comparative advantage. They'd be getting the direct benefits of any biofuels and not the direct costs as they are now with high commodity prices that would be at the top of the agenda in the G-20 in June.

MR. CÁRDENAS: Thank you. Any other comment? Yes, the gentleman in the back.

SPEAKER: It's about the Brazilian participation in the --

MR. CÁRDENAS: Can you speak up a little bit?

SPEAKER: Yeah, I can. Can you hear me now?

MR. CÁRDENAS: Yeah.

SPEAKER: Okay. It's about the Brazilian participation in Latin America GDP. It's the highest in two decades. So I want to know if there is some kind of systemic risk for the region or if it's good or it's not a matter of concern. That's it.

MR. CÁRDENAS: All right. Anyone else? Well, if not, then let's come back to the panel. I think there are questions for everyone. Maybe you can start taking -- there was a question about Peru. There are a few questions to you, and then we'll go to both ends with our own reflections on the report. And by the way, we'll have 5 minutes for this, so be brief.

SPEAKER: In answer to -- about -- I think the difference in the case of Peru, I mean if you compare Peru with Brazil, I think it's -- I mean, in a way Brazil came after Lula lost a few elections and actually had already modified his speech and his economic policymaking. I think in the case of Peru right now, like somebody, some political analyst from Harvard put it, with Obama we have questions; with Fujimori, we have certainties, right? We knew that Fujimori killed, robbed, et cetera, et cetera. I would imagine that we don't know what's going to happen, right? Now if Obama turns out to be a good policymaker and I mean he moves to the center in economic policies, that would be more because he can be moved by certain people. But I don't think right now it's in his head. If you talk to the guys who are managing his economic policies, I don't think you see a lot of sensible policies yet. It may come back to there, but I think it will be a challenge. And I don't think we have seen in Peru yet the sort of transition from the left to a more central policy, so I think it's -- I hope that's the case. I hope you're right.

MR. CÁRDENAS: Thank you. José Luis.

MR. ESCRIVÁ: Okay, probably I should focus on the question on the Spanish experience on financial macroprudential tools and the lesson that can be drawn. I think there are two episodes which are of interest. One is less well known, but I think it's very interesting. It was in the previous cycle for Spain to use in 1990 capital controls, direct controls, with resilience that could be extended by each particular financial institution, breaking with the tradition of market policy for 15 years. And it worked for one year. I think credit dynamics were broken. There were inefficiencies I would say, no doubt. I mean, there was across-the-board control, but I would say if you look at that episode, it helped to break a dynamic credit and afterwards there was no fiscal conciliation whatever so the crisis came and the exchange rate crisis in 1994 and 1995. But at least this allowed, as I think is the case for these measures, to gain two or three years in order to give more room for more fiscal policies. So it worked for some time, which I think is the sense of these measures.

On the other that we introduced later in the mid '90s, late '90s, the anti-cyclical provisions, I would say that they worked not primarily for what they were designed. They were designed in order to introduce a wedge in interest rates and to the extent that banks were going to pass these costs to the lending rates, we were expected to cool off a credit. When you are in a boom, you really need to introduce a huge wedge in order to have even though the elasticity is limited. So I don't think that the -- there were some effects actually when you look at what happened when there were bank pressures and these provisions were relaxed in 2004. There was a further credit boom.

So you can indicate that it worked somewhat, but it was very helpful in order to create a buffer so that, I'd say, appreciable banks in terms of prudence. They had been navigating through the crisis very well without the need to access the market or capital increases. So they are helpful in this second respect. I would say they need to be tested, as introduced and tested as said, but they should not be seen over a medium term as a substitute for, let's say, the right policy stance on fiscal and monetary policy, our instrument that helped to deal with the timing of the cycle.

MR. CÁRDENAS: Thank you. Eduardo?

MR. LEVY-YEYATI: Okay, very briefly. On macroprudential? Yes, of course. They say at the end of the report with the rest of it, but they -- and we have the right one report every six months so we are keeping this for the next one. Biofuels? Of course, yes. It's another source, another global source of uncertainty you have to take into account. But it goes in our direction, it goes with our argument, that you still have very short attached so you can revert very easily if biofuel strategy actually doesn't play out.

Arturo on fiscal responsibility, of course, is important, but it's just, I think, part of the story although Mauricio probably has something else to do to say about this. Let me just mention three things that I think we learned or we started to think about after doing this exercise. The first one has to do with what Piero said. I think that this idea that they're making a decade is good for marketing purposes, but it's bad for policymaking because it's very difficult to manage heightened expectations. That's where the title comes from. How can I tell my constituency that we are not going to grow at 7 percent without inflation or vice versa? How can I actually reach a non-inflationary growth path of 7 percent and be like Asia? Brazil is not China. The mass media is bunch in Brazil with China. That doesn't help Governor Tombini or the President or the professor of economics anywhere in Latin America. So I think we have to sort of fight against that. Ilan Goldfajn said when we were presented this, the first report last year, I think we need some countercyclical marketing policy, right, because we were not that bad at the beginning, and we're not that bad right now. So we have to manage that, managing expectations is important.

Something to mention, there is some contradiction here even during the discussion that I think we have to manage as well. We have an overheating economy and we're having a structure deficit. I mean, look at Brazil in particular, how many -- I think the best infrastructure is needed because of these big events, right? This only adds to the problem, to the appreciation problem to inflationary problem. So we have to pick one of those. We would kind of like to ignore it, the infrastructure deficit, and we are starting from an overheating situation. The fiscal front then is a little more complicated unless we want to ignore infrastructure deficit.

And finally, something I think is important to bear in mind and to follow very closely, and it's not a recent process. Yesterday was a discussion and something was mentioned that was relatively shocking, that Latin America lost the industrialization window. And he was referring essentially to the fact that we cannot compete with China and, of course, in Germany it happened long ago. So we are trapped into primary resources, our industry or something we can do with these primary resources. But it's very difficult to compete on that window. Probably we will never do that, and if you look at the margin that you see in these pictures which is they lower the declining, steadily declining share of industrial production in the GDP. There's not a problem with -- that doesn't come from real appreciation. That's been going on for decades actually and particularly in the last ten, 15 years. This is a problem. It's a problem in terms of the quality of employment that is generated. It's a problem with income distribution. It's a political problem. And it's a problem because it's a long-term problem. It's very difficult to manage by politicians that have a short horizon. But I think this is a pending issue. As for the exchange rate, but something that has to be discussed more and more profoundly. Thank you.

MR. CÁRDENAS: Well, I think there -- I mean, you covered most of the responses. Let me just say a couple of words. One on China, a comment that was made by Piero. Yes, we don't know. I mean China is a black box. What's going to happen with the commodity prices? It's very uncertain. I think the safe assumption from the point of view of policy is not to consider that there is a permanent component of what's going on is the most important. It's more or less hoping for the best by preparing for the worst. I think the policy to keep has to be set in motion in a way that that assumption will be too risky to maybe an assumption that China and the food commodities are going to go on forever.

We do provide significant elements, showing something that is interesting. We've traded these two external passing shocks in terms of trade and the capital flows as relatively independent, but when you look at the common determinants of these two shocks, you understand that it's the global cycle. It's a global cycle that by definition at one point is going to implode either because of China or because QE2 here in the United States. So we have to prepare for that. That's why the current appreciation of the currency, something you can call -- or that you see the symptoms of a Dutch disease. Otherwise we will just not talk about the Dutch disease. We will talk about the adjustment to more appreciated currencies. And I think there are signs of the Dutch disease. What you just mentioned about industrialization, the high unemployment figures in some countries. So dealing with the Dutch disease I think it's first acknowledging it and dealing with it is the key point of this report.

Now do we miss fiscal policy? No. Maybe we talk more about these other elements of the toolkit, but we by no means want to give the impression that these are substitutes to fiscal policies. These are complements to fiscal policies. I mean, if needed, we have to do a report just talking about fiscal policy because I think the basic message at the beginning of the presentation is that we still are behaving with fiscal policies as if the world economy remained in a recession. And it's very interesting to see that the countries that are more well known for their fiscal rules are actually the ones that have forgotten about it the fastest. So we really do place a lot of emphasis on the fiscal side in terms of the way we see these prudential macro policy framework and fiscal policies that keep coming. At the end our message is let's not leave the central banks alone. Central banks cannot do this. They need all their measures and fiscal is key, but also these measures on financial regulation.

Now, we think that the menu is quite interesting, and we don't say that we fully endorse, but we highlight that there is something that is taking place in places like Turkey where you create this gap between the deposit rate which is what drives the carry trade and the lending rate. And if you can tax that, and if you can actually design innovative ways of creating a wedge between these two rates, I think that's a way to go in terms of releasing the overheating.

So with that we'll end. Thank you to the two panelists. Great comments as always, and thank you for the questions from the audience. And now let me welcome Minister Echeverry and Governor de Gregorio to the table here.

All right. Well, thank you. Now we come to the final panel of this session. I'm delighted to introduce the Governor of the Central of Bank of Chile. He's a very good friend for many years, a very distinguished colleague. José is now Governor of the Central Bank, was Deputy Governor of the Central Bank of Chile, was Minister of Energy in Chile during the administration of Ricardo Lagos, has been here in Washington several stints both at the World Bank and the IMF. He has a PhD in economics from MIT and above everything, a very well-respected economist with many, many interesting contributions, some of which surfaced earlier on before you arrived on the effectiveness of capital controls. And I'm sure that in his presentation, he'll enlighten us with his views on what's going on around this interesting debate and the policy issues of Latin America. So José, thank you very much. It's always a pleasure to welcome you here to Brookings.

MR. DE GREGORIO: Thank you very much. I am sorry for the confusion. It's a pleasure to be here, and I basically will talk about four things. At first make a very brief interaction about Latin America, then I'll talk about macroprudential. Just a note, when I wrote this macroprudential, it's the only word in the full presentation that the dictionary of Word didn't find. So it's a -- just to start. Then I'll make some comments about Dutch disease, and then I'll go to the core that everybody wants to hear, when the Chilean talks about capital inflows, exchange rate compensation, capital controls, and whatever. Capital controls should be the last one.

So just let me make you some comments about the macro performance. Latin America had unprecedented performance. It used to be that when an advanced economy had the flu, Latin America had the pneumonia. And what we saw in the crisis that the world had pneumonia and Latin America got the flu. So this is, I think, quite important. Why? And this is a part I think in this report I would have liked a bit more discussion of some of the topics, especially going on a country basis because what are the reasons for this extremely successful, historical performance? I have gone a long time to see data, and it's very difficult to find a period in which the world economy is falling and Latin America on average is falling about what the world is falling and recovering much faster.

So first, good macro policies: Inflation is low. There is some form of fiscal policies. We can discuss a lot about how to deal with the macro basis, but at least from the levels of public data to fiscal reform in many countries, I mostly focus on lot 7 as the paper said because there is a lot of originating. So fiscal providence, much more independence in the bank. You don't hear people saying that inflation has no cost. Everybody knows that it's costly so I'm talking this is for a wide variety of political inclinations. I think that there has been a severe improvement in macro economic policies.

Second, financial systems are much more resilient. We have had so many financial crises that finally we have a relatively sound financial revelation, perhaps it could be financial underdevelopment, okay, but in a way we didn't went through the excesses that went into advanced economies. And that, of course, it makes recessions much more less damaging because the financial system stays sound. So here they said discussion, and thinking about the future, if it isn't broken, why fix it. Well, we'll have a lot of discussion on what to do with the new macro policy than what we have been doing in the last ten years was relatively okay.

And there is a fear factor, which I think is sort of the risk factor. It's good luck. We have had very good terms of trade and usually good terms of trade, historical high terms of trade. As we were sitting there in the previous presentation, I tend to agree that we are going through a cycle -- I wouldn't say long term, but it's a relatively long cycle of good commodity prices, perhaps not as high as today, but that does not imply that some adjustment may happen especially if interest rates in the advanced economies start going up sharply, we will have a correction in terms of trade. So this is a risk. So if terms of trade are high and they decline sharply, what will happen to Latin America? So I like to think of this as conducting a stress test. We should have stress tests of Latin American economies. What happens if, let's say, corporate price goes to a $1. I think that's very little in this economy. I won't talk. I won't make propaganda. That's not the purpose of this discussion, but very little. But perhaps if somehow corporate, whatever, oil is declining sharply, that could be extremely damaging. It could be a tail risk, a very small probability event, but I think that's where a big risk.

Now, we have a new risk also today, and I would have liked -- I went through the paper so I didn't come to the presentation, but I read it and I would liked more discussion about the resilience of Latin American economies to terms of trade shocks. I think that that's a one big risk. And there are risks -- this is a real risk. It is not a tail risk. It's overheating and inflation and this, of course, may bring financial --

So let me go to my second point about macro -- these are just titles. There are some -- a couple of figures so don't expect me to go to the tables and figures and figures -- so macroprudential policies. As I told you, macroprudential still does not exist in regular dictionaries, at least for Microsoft, what they call regular dictionaries. They are extremely broadly defined, and they can be used to do whatever. So it sounds mainstream to say that I'm not doing control. I'm not doing fixing things. I'm doing macroprudential. That's kind of cool. So it fits everything. And so I say we're very prudential. We can do this new policy. But I want to -- I have tied to my own definition which is very close to what Goldfajn and everybody said, the BBVA said, so there are policies to avoid. The building of financial realities, coming from the interaction among financial institutions, among themselves, or with the macro environment. So this is macroprudential. What we don't want is the financial system to have systemic risks that can contaminate the whole economy.

So in this regard I'd like to -- the two-way measures that are used to distinguish macro policies. There are interactions among institutions at this moment of time and there are interactions of the financial system with economic environment over time. So the over time they mention is the dynamic dimension, and this is also the discussion about procyclicality. So then there are discussions in the world; Basel III and many regulations to avoid, procyclicality. At the point in time there are the big stories about the "too big to fail." "Too big to fail" is a problem. There are institutions that are too big or too interconnected or too relevant in the financial system that since they won't fail, they can take more risk and they can generate a lot of costs as we have seen. Even small institutions because of their role in the liquidity and in the means of payment, it can be very damaging the problems with these institutions. Of course, there is with it, too, the "too big to fail" there is a seriously more hazard problem, okay. So then for macroprudential, one has to do very clear rules for resolution, okay, so also for shareholders paying the cost -- they said whole dimension.

In terms of emerging markets, one can think that the use of reserves, the use of reserves, can be used in order to build insurance over time. There is also the insurance provided by the IMF and there are some other insurance. I think I said that they are not used because regulation of reserves have two purposes at one time, which is to insure yourself against sudden reversal of capital flows and at the same time you intervene in the foreign market. So that's what you do and that's why countries do not go and get perhaps trip insurance from the IMF because they say when I accumulate reserves it is expensive, but I also provide some intervention in the foreign market. And I carry this -- you made a point -- this is not about what you said, but this is about this. I think that having reserves, they don't reduce the risk premium, but I think that they are a deterrent, but the past is the following: Countries have a lot of reserves and they don't use them. And then you say well, but why do they have so much reserves? They don't use them and they don't have problems of financing. During the peak of the crisis, just a few countries -- did you see them? -- who had reserves in the worst crisis since the Great Depression were hardly used, some in Brazil, in Mexico, and Korea because of some corporate influence to stabilize them, but very, very small. So why is this? Well, we shouldn't have reserves. But at the end they serve as a deterrent. Now what's the point if all the world has a lot of reserves, then the optimal or the reasonable limit of reserves depends on what the others are doing because financial markets discriminate. They look at the sample. They say well, look at the population. They say which countries are -- so if all they have is a lot of reserves, they say okay, let's have a lot.

But there are two other dimensions of macroprudential that I think that are more -- we can discuss. One is a truly macroprudential that we said, and the other which is here where it comes to discussion, it's not macroprudential. It's macro policy. But it's a complement to monetary and fiscal policy. Why? Because we don't want to do monetary policy that affects the exchange rate so instead of raising rates, we'll put reserve requirement. That's very old fashioned. That's old fashioned -- you can tighten monetary policy raising rates or increasing reserve requirements. So it is quite standard. It's quite old fashioned, I would say. I would call this "non conventional macro policies," but not to go and say macroprudential. I think that that's kind of a good use of the name. So let's talk more -- now, I agree that there is a fine line to divide this because one policy may help, for example, condition of reserve, foreign exchange rates, and at same time, for macroprudential reasons. But there are also instruments that you can look at if you're worried. It's about some potential financial vulnerabilities. Many times there are truly macroprudential rules or policies that not necessarily becomes to this broad issue of capital controls. If we ever worry about currency mismatches, the first and the best -- and by the way, Latin America had a huge -- did you see that -- I didn't -- if you see, they were exchange rates during the crisis that were depreciated 20, 30 percent and no financial problem because currency mismatches were not a problem in Latin America in all emerging markets. Buy why? Because they use the macroprudential rules that lead currency mismatches to the amount of capital and then you have tons of rules. Then if your problem is because we're taking too short or because we are borrowing too short and there is a maturity mismatch, which is a maturity transformation is part of the banking system, but if it is too much of a maturity mismatch, we can do levies, we can do provisions, we can do surcharge, and go straight to the balance sheets of banks without saying that there are other things.

The other thing, and this is one reminds me something I discussed in '09 about still no fears, something that I said in just a couple of years ago here at Brookings. They said one problem of financial vulnerability in emerging markets that is complicated, and it's bubbles in emerging markets. Why? Because there was a huge discussion about how we fight bubbles in advanced economies. If you have a housing bubble, you say let's go up with the interest rate and perhaps this may have effects. But what are the kinds of bubbles that we have seen in emerging markets? The kinds of bubbles that we see in emerging markets are bubbles on the country, so the bubble is not in one asset.

It's in all domestic assets. And the way that the bubble appears is just the exchange rate appreciates. And then you say if I find the bubble, increase the interest rate, I will create more capital inflows, and I may make even worse the problem of the bubble. This is, I think, a big problem. You can do in that case, and I think that if you want really to burst the bubble, you can do intervention and you can do things on the chance basis.

So my impressions today, we don't have a problem with bubbles. We have a real problem with the high terms of trade, strong economies, and I have one rule of thumb for currencies. And the rule of thumb says strong countries, strong currencies. And that's why emerging markets are "suffering." The strength of emerging markets is good returns.

Will we see that there will be differences in industry, whatever? No, there are differences in returns because it's much more profitable in emerging markets than in a developing country. So this is the real problem. So I wouldn't argue that we are going through a bubble except those that we create because of mistakes or mismanagement of macro policies.

So now I shall hear Dutch disease. Let me make a couple of comments on Dutch disease. I want to go to the last point so there really is a disease. I always say when I go to Congress today, we are going through a -- and from all they said in Chile -- and say I would like this country to be like Holland so as to be Dutch. So there is a problem. The Dutch disease and you go with the details about this when it was in the '60s and discovery of oil. But at the end countries just had high income. They live pretty well. And so I would really like to have that disease. There are much worse diseases.

Now there are tensions and why is the disease? I think the disease is two things: Because of terms of trade, they're high or because you discover a natural resource. It doesn't matter. Whether it's the value or the quantity, it's the same. This brings, I don't -- I find a big blur in the discussion about this is capital inflows. No, this is a natural resource boom. The country becomes richer. This may bring capital inflows, may not bring capital inflows. In Chile there are no capital inflows because we know all copper, but copper is going up and up and up and it's the same. It's like discovering a new mine because prices are quite high. Then the underlying idea is that the commodity boom leads to an appreciation because of many factors, hurts the manufacturing sectors, and this may be detrimental for the country. We have to tell story that the industrial sector provides some externality that the natural resource sector or even the service sector or, let's see, the IT sector, has no externality. So the externality here is in building, I don't know, industry, I don't know, cars or whatever, TVs and whatever. So this is a -- I'm not so sure -- and the evidence roughly shows that countries go through increasing commodity prices. They can adjust. Chile has had a huge commodity boom, but we have had also record growth in employment based on growth. So I don't see -- there are tensions and there are a lot of tensions because of the exchange rate adjustment. But I wouldn't put it as a problem of the Dutch disease. There is a long-term discussion. I will not go on about that, and they are a curse or a blessing and they saw this as catching why Africa, which is so rich in natural resources, is so poor. And I think something has to be with a rent-seeking society. I won't go there, an institution, some human capital, but I'm talking about Latin American middle income country.

So let me go to my last point, which is stabilizing capital inflows and exchange rate appreciation. Well, we've seen the world. No fears yet. Well, we've seen the world, large interest rate differentials. Why? Because the U.S. won't raise rates for a while, we have inflation, and we need to raise rates. So that's very simple. However, interest rate differentials are not so huge today compared to the last ten years. Interest rate differentials are 4, 5 percentage points among emerging markets and developed countries, and they are not alike. There is dispersion across countries, but overall, it is not huge. They were much bigger in the early '90s when there was really a problem of capital inflows. When Carl Ricker later wrote the early '90s paper on the capital inflows problem, really there were capital inflows coming to emerging markets, large financing, large current account deficit, and creating financial boom. Today, emerging markets have a current account surplus on average, and most emerging markets have current account surpluses. So on the net we're lending to the world, the world is not lending to us to sustain a consumption boom.

So there are differences in exchange rates and there are capital inflows. Now, the issue here, which I really -- especially with this discussion of macroprudential, what's the objective or what's the purpose of macro policy? Is it exchange rate stability? As the paper said in a way, let's try to avoid volatility. Is it that we worry about the level of the exchange rate as Piero said or is financial boom early '80s? And I think that the three are mixed, and we'll have to be very clear. It could be the three of them, okay, but let me tell you. Regarding exchange rate stability, I think that much more important than trying to stabilize with the government that sometimes is very successful, especially when markets are very deep, it's that you have to create a foreign market. We said this like ten years ago, 15 years ago, in Chile, and the foreign market has really, really deepened. You see now, first it was for big firms, now small -- well, not small, but medium-size enterprise, they all have insurance for their currency exposure so there is a deep market that can protect and hedge against stability. And the way to incentive the creation of this market is to have a well-working financial system, but at the same time to have some volatility to hedge. If the government is the one that is in charge of doing the stability, there is no incentive for the private provision of insurance.

Second is the level and I think that we have to recognize. We worry about eleven. We worry about eleven because of the transition, because if there is a lot of pressures. There are costs in the transition and the reallocation of resources. Now, it's not that we have an objective of eleven, which is what markets would like to know what your objective, what your level is. No, you worry when they say a sharp appreciation because -- and then you can do things. And that's what in Chile what we do is intervention.

Now we have done it twice in Chile, intervention, and I'll go immediately and show you. I think that this is the best. This is very interesting, well, I hope. This is the first one. This is intervention 008 and intervention 011. We intervened in April '08. We intervened in April '11. The intervention is almost the same: '08, \$8 billion; '11, \$12 billion, it's a bit bigger. And we say well, we'll accumulate new sales to have '11 that we think that is adequate. We do it with \$50 million a day in an auction at midday and fully sterilized. I didn't put it down, but the rates now they have been more stable than before. But exchange rate in '08, it went up even in the first two months 20 percent. Then it established and then it kept going up because this was when the world was exploding. In contrast, now it has been extremely stable, extremely stable. Overall in our estimation is that the effectiveness is limited. If we take only the '08 experiment, we will say okay. We put it down for when we started intervening and you see that the thing exploded. But there are many differences. I'll just show you two differences. Here is a longer story of the Chilean exchange rate, the blue line. The red line is the multilateral dollar. So what's happened in '08 that when we start intervening, the dollar is strengthening. And why is it strengthening? Because after Bear-Stearns there was a reduction of risk appetite and the dollar strengthened. So part of the appreciation that we see in '08 was that the dollar -- you see the correlation between the green line coming down and the blue line going up -- now the dollar has to remain at the weakest level of a very long time.

What happened? This is just to summarize. In '08 after we started intervening, just after we started intervening, the corporate debt started coming down. Now corporate debt is at the highest level and we expect in December futures have gone up. So that is very difficult, so the effectiveness is limited. Within it still lies very mechanical because we want to keep full control of monetary policy. So we say the effectiveness is limited. We have completed our regulation for that. It's quite sizeable. It's about 4 percent of GDP. It may have 3, 4, 5 percent effects on the exchange rate.

So let me go to the most puzzling issue, which is capital controls. It's very ironic because Chile is the poster child for capital controls and Chileans are the most skeptical on capital controls, which is -- I wrote paper trying to find effects for capital controls and I didn't find that many effects although a lot of it we say that we found it in the interest rate and other things, but at the end what we wanted to do with capital controls is exchange rate is not interest rate. So at the end, the final test is whether capital controls avoid or prevent appreciation in taxes. What do you do with the interest rate or whatever? That's secondary I think. I think that the purpose -- everybody said we don't want -- because we want to have money. No, no, because this appreciation in currency will affect our exports and export growth so that's the final test.

So let me go to Chile and let me tell you here -- so, there is -- before I go to this, there is a discussion about and we found in the paper some effects of composition inflows is it tilts, it tilts. It flows from short term to long term, of course, because Japan is more short term. Now, the issue is where you can do that straight with financial regulation. You just change provisions to whatever to banks. You know about exposition to short term. So it's not needed to do hitch. Now, in the paper what we did was to compute that there was a significant effect, but in the economic effect, the magnitude was quite small.

Second, there is -- I'm very confused because we said this and there are others who think this way -- but I have come with one doubt recently and it's about causality, whether countries that carry high interest rates, they find a lot of pressures on capital inflows so then they create a capital controls come after. So basically what we see and what we compute is to say well, capital controls and differential interest rate, but there is no causality, there is no discussion what leads to what. In Chile we started applying in the early '90s the capital controls, but with real interest rate close to whatever you take, a 5 percent paper at 8 percent, so quite large interest rate, okay? So when we have much more normal, much more normal interest rate in the 2000s, that's why we don't see now. We're not floating of capital inflows. If you go and see the figures for Chile, most of the inflows are corporations that are borrowing abroad because there are good conditions and they can. So this is most of the interest, but there are no -- many funds to come to. There are some, I think, and I think as the rate goes, there probably may be more, but it's not a huge inflow. This is the difference in interest rate. So this is the period of capital inflows. There's such a huge difference between interest rate, domestic and foreign interest rate. We're talking about a peak of 6 percent in some areas. So that's a real differential. We don't go much milder, very close to zero in the future when you adjust. And this is ex post inflation. This is just to illustrate that the initial about large, very substantial interest rate that we don't know whether they came before or whether they were the cost of the capital inflows and then interaction of capital controls. And this may happen in some other countries recently.

So just before going to the last figure, just one final -- capital controls have distortions and the relation with costs, capital controls have distortions. First they create discrimination because those who have access to foreign financing can finance themselves. A small and medium enterprise, they tend not to have access to foreign financing so this is discrimination.

Then you move from the regulated part to the unregulated because in general, capital controls are the following forms: No speculation, just proactive capital is a very blurred definition. But you say, we don't want speculators. We just want people that come to big minds. So minders, they come, no capital controls and the no minders we don't want you. This is not the minders. This is just a story to tell the story. So minders we say come and say okay. I go to your country because good corporate price. I want to invest in your country. I want to be the mind. And I want to enter to your country $5 billion just in case because the mind plus one. So who's doing the arbitrage? The minder, the CFO. So there is a lot of loopholes. And then we start moving to a new one. I think if one was to do it, just go plain. Go plain and let's avoid a discussion. That is, go abroad and see country by country if you are productive, not if you are speculators. I have a lot of forms to understand that.

So this is the last figure. It's the relative rate. This is the relative rate. In the 2000s, we have had floating, a lot of volatility, we have had floating, some intervention, some intervention at the peak here in one or two, and then intervention here and here, okay, some intervention, partial effects. But if we look at this figure, what's the lowest, most appreciated exchange rate here? What happened here? We have low corporate price. I think that was 150. So it was low corporate price. The economy is not like today that we have a lot of net falling assets where we're a very rich economy -- we're not that rich -- we have capital controls. We accumulated reserves and we have an exchange rate ban. So I don't need too much regression to say that this is very disputable and they said -- and this is my final comment about capital controls and the way to post capital controls. Contrary to when you would do something, very rule based. And this is the capital controls I have heard and many policymakers said, "We just will apply capital controls to smooth the appreciation, not to avoid it." Of course, what's the message for investors? Let's go now because in the future, we will assume expenses. So we exacerbate capital inflows and pressures of the currency basically because unless you have something rule based, very well defined and very stable like what we do with exchange rate intervention. So those were my remarks about that.

MR. CÁRDENAS: Thank you, José. Let's move on now directly to our last speaker. We're already past the time so I'm going to be brief, but I have to be -- but I have also to say very especially that I'm particularly happy to be hosting today a very good friend, a very admired economist and remarkable Minister. And it's always good to host friends, but when they come to us with other qualities it is an even more fulfilling experience.

Juan Carlos Echeverry has been Minister of Finance in Colombia since August of last year. Prior to that, he had a long career, Minister of Planning in the past, Dean of the School of Economics at the University of Los Angeles, and a very well respected economist and commentator in our homeland, Colombia. He's doing a tremendous job. Yesterday -- he's probably going to talk about that -- one of the big challenges that he has is to change the way Colombia handles royalties from natural resources, especially in mining and oil. And it's a very difficult process, but in the end, it is a process about fiscal sustainability, it's about saving, it's about all the important things we've been talking about today. And if it was not because of his leadership, all these reforms would not be taking place. So, Juan Carlos, it's always a pleasure and it's a great honor to have you close this panel.

MR. ECHEVERRY: Thank you, Mauricio, mucho gracias. I will have comments on two, first on Latin America based on what I prepared -- I've made some comments, and then I will focus on Colombia.

Ever since from the IDB which separates the, let's say, Mexican-type Latin American countries from the Brazilian type, I think it's not precise, but it's helpful. And these, of course, are all the other types of economy which is the market friendly, vis-à-vis the not so friendly. So we couldn't make a quadrant and put the Mexican-type market from the Brazilian type. And that helps mapping what could happen in the future because in the past what the puzzle for Latin America is wherever you are in that quadrant, you have done well. Market friendly or not, you did very well, and Mexican type or Brazilian type, you have done well. What's the difference between the Mexican type and the Brazilian type is more dependent on the U.S. and partly -- but to say Mexican types are more dependent on the U.S. and the Brazilian types are more self dependent like China and self-style type of growth, type of trade. But the puzzle then is we all did very well during the great recession and during this decade. Of course, the explanation, I think, is clear in terms of trade during the last ten years or whatever you did rightly or wrongly, micro and macro, was not punished because it was rewarded and we are all sitting on a pile of enormous wealth. Some of this wealth is paying very well. So apart from your micro and macro management, we all did well. Of course, capital flows helped and that is the situation right now.

So what comes in the future for the region I would say that this would help because I'm seeing, let's say, at least five types of challenges. For the next two years, two or three years, maybe the unraveling of the U.S. and Europe stances in monetary policy and fiscal policy will be affecting all of us. And that's what worries me the most. When I heard in the last meetings in October, Secretary of the Treasury Geithner, telling us, the Ministers, about QE2. On the plane coming back to Colombia, I thought we have to defend ourselves with everything we have against this thing, which is because this transitory is substantial. It will have very, very ill effects on bubbles and we -- there's no way we have to pay a cost for what's happening in the U.S. But the U.S. policy and the European monetary and fiscal policies in the next two or three years pose a big threat for us. I talked to economists and nobody seems to worry. The economy is very rosy. It's an honor for the U.S. and the Europeans say improving and the IMF reporting and everybody seems to be very optimistic about this. But what I learned in my university in my studies was that unsustainable policies at some point show up their unsustainability. So maybe you can have this in advanced countries for longer periods, but coming from Latin America if you pile up reasons for unraveling, at some point it comes. So as Finance Minister, that's the thing in the short term that worries me. In the medium term from, let's say, 2014 to 2020 the other unraveling I'm seeing is in China and India. When you look at the picture 320 from your report, many other reflections is how China and India can grow, let's say, and you were saying probably not 10 percent during another decade, but maybe at 5 or 6, which is great. But then prices of commodities will come down, right, secularly, and then we have to prepare for that. And the reaction of Latin American countries then will be between who are Mexican type and Brazilian type and who are market friendly and non-market friendly. I think that the key issues are how can you manage in terms of threat on trade unraveling in the long term, let's say, past

2015? And that would be the negative part, but the positive part also is there will be the return of some manufacturing. The Dutch disease that you are identifying -- and these reflections for me started a few weeks ago -- I got this visit from a manufacturer of apparel in Cali, which is the most industrialized city in Colombia, and she told me that the orders from the U.S. were pitching at a record high. And she said everything we produce we're selling it to the U.S. and keep more orders and orders. We keep getting more. I said why? And she said -- and she's not an economist, she's a businesswoman -- she said it's because labor prices, labor costs, in Asia, and especially in China, now are very close to ours. I said wow. This is a completely different ballgame. Let's say not immediately, but in the next five years, the costs of labor in China and India will start approaching or not the differential we have seen in the last 20 years, 30 years, but let's say 10 to 20 percent difference. Well, we can be back in the industrializing business. We have been out of this business in the '60s because China and India came on in the last 40 years. But will we be out of this business in the next 30 years or 20 years? Well, that's a good question. I don't know, but I see the first signs of the possibilities that a country that has potential in manufacturing -- of course, Brazil, and I see Colombia in that -- the Brazilian type, market friendly, I see very good possibilities that we can manage the terms of unraveling, which has positive sides. As negative sides we'll know them but also has positive sides and the return of manufacturing.

The third challenge for me is avoiding bubbles. José Luis said, and we all know, monetary policy and creative policies for me are the key issues in doing that. And fortunately, we have good terms from bankers. We have anticipation in monetary policy, and we have proved that in the last five years. I think most Latin Americans I think are doing very well in this.

The other thing is finding a source of growth. I will go to this issue in a second, and the other thing is flexibility. With these general comments on how I see our recent past and our upcoming future very broadly, let me go then to Colombia's story because if I don't do that, I wouldn't be doing my business which is promoting Colombia and telling you what is our story.

So how does Colombia fit in this broader picture and what were we doing? First, in the recent past, Colombia came from agriculture to mining in the '80s and '90s, came from macro threads to security, all the cocaine-related, et cetera, to stability, to security. Let's say that has been down 70 percent, it's not already fully done. And also the shift from agribusiness to oil and mining is like 60 percent and that shock last 30 years and from fiscal instability to I think sustainability.

What is happening in the immediate future? I have discovered the eight months I have been Minister of Finance, I have my epiphany has been that everything is fiscal, almost everything is fiscal. If you do the fiscal front right, your monetary policy is much easier. If you do your fiscal policy right, your exchange rate policy is much easier. So basically, macro is mostly fiscal, but fiscal is mostly micro which is -- how do you manage that because fiscal you have to go to Congress and I think friends here and friends there and it is micro. So you have to go -- if you get the fiscal right, you get the macro right. But for doing it well, you have to have a very solid micro story and economic plan and economic story.

So what are we doing? We're doing -- we just did a reform in taxes, a healthcare reform and employment for all of them already approved, which are okay, and I don't need more revenues in this. What I need is more micro. In the micro we're doing a constitutional reform, changing and then transferring is creating a sovereign wealth fund. But for us it is interesting because it is a sovereign wealth fund of the regions, not of the central government. And it will be a substantial fund, having a rating in five out of eight debates. I just approved the fifth debate on Wednesday. And it went basically without opposition. At the beginning there was opposition, but recently we have -- of course, I could tell you the whole story, but basically political has helped a lot and we are doing an amazing job, I think, in creating savings not in the central government now, but in the subnational governments. We're passing a fiscal rule which we will do this for the central government and, of course, the regions are asking me well we're going to save $1.5 billion per year no matter what the central government going to do. So we're paying our share into passing a fiscal rule, and we're passing a fiscal sustainability constitutional reform. This is interesting. Apparently only Germany has fiscal sustainability in its constitution, which is very philosophical, but there the debate has been hectic. The difference between center right and center left has come to the fore and the debate -- I am, of course, I'm center right. And if you ask people in Colombia, I'm right from the center right -- but it is very interesting, I think. I just approved the fifth debate on that out of eight as well. And we will introduce fiscal sustainability in conjunction which is interesting because our constitutional court is very active. Congress is Congress everywhere. And also central government is complicated. So they say if we have been doing well fiscally, what do you need then? I say well, maybe I know Greeks would like to have that included in their constitution. So you don't do this for Ministers who like fiscal austerity. You have these provisions for Ministers who don't have -- who are very austere. So that reform is interesting. I'll just stop there for a while.

Let's say basically with these we would still have a good tax reform because along with adjusting for revenues, but now we have to deal one for the microstructure. But with these we want to stress, I think, the two words or the one word which is crucial for the future, which is savings, especially in this part with terms of trade, positive terms of trade shocks on everything going well and growth going well, that you have to save, save, save. If you do that, that's basically the advantage for fiscal policy and that's what our President already has primarily bought this agenda, but this has internalized it in order to avoid a commodity price linked with mergers and to do -- I mean, base accounting of our actual wealth.

So in the fiscal front basically, that's the agenda. We have done mostly all of the whole array now. In exchange rate, in October, President Santos called me and said look, when I wake up I think of some criminal bands, bands of criminals which are nasty in Colombia and the exchange band I think of the exchange rate. I mean, I thought, do it. I thought I'm done because while sooner or later, sooner for that the military killed a bad, bad guy. And I said well, I don't have it. I don't know how to devalue the exchange rate. And I said well, actually that's true, I don't know how to do it, and we economists don't know how to do that. I mean I have been -- I have been coming to IMF for 30 years, 20 years, 30 already it seems, 26 years now in my professional life, and we economists we like to talk about the exchange rate. We do regressions, but we don't know that much on how to manage the exchange rate. So I called what I call the pirates, which are people in the market who actually have been attacking. And I appointed one of them the head of public rate, another one which is a woman who was one of the best traders, my advisor. And on the other side of the table, the two or three people who have been in charge of controlling, let's say, capital inflows and the exchange rate the last 15 years. I said, yeah, we have on the left-hand side we have the creators of all distortions, and on the right-hand side we have the people who have an avoidance of older distortions, so please tell me what to do. And we were working for two weeks, and we came out with -- we tried to avoid and we still try to avoid for the reasons you mentioned actually -- capital controls. And we came out with key urgent measures, but basically the truth was easy. This is basically fiscal. You'd think he had nice and they were effective. For instance, there was a withholding tax on interest paid for domestic borrowing, but there was not for foreign borrowing. So there was a tributary incentive to borrow. So we imposed -- which is what you have here in your report -- a withholding tax. But basically it was stop bringing dollars which is -- after those sessions I just said we'll keep capital controls dividends in abroad, in the U.S., which were at that time about $1.5 billion because I could because I had the revenues, the fiscal revenues, I could do that. So at that moment the exchange rate started devaluing and it devalued like 5 percent in the next day, two or three months. My wife who is a very good economist doesn't believe there is that. She says it is just luck. There was China, Portugal, et cetera, though I don't buy that story. But that's my story. I still believe that at least half of that devaluation was because of our policies, but basically I still think that the very conservative type of intervention of the Colombian Central Bank or the Chilean Central Bank is the right way to go. We buy $20 million per day in a very preannounced fashion, but if you don't pair that with a very strong fiscal scenario, that doesn't work. I mean, it's basically fiscal and the same for monetary policies. So I would be -- now I'm up for working with practitioners who know everything because every two weeks there's something new in the exchange rate markets. So I call this guy. What's going on? What's the news today? And this guy tells me we should today's a world pass and they say two or three weeks because of this and this and that, and to other types of things they say we should start to think about how to wrap. And I think that we have -- my take here, and Velasco told me before I started my tenure as Minister told me, never stop intervening verbally. So you have to stay in the microphones almost every day, saying I know interest rate pays, exchange rate matters. I'm working on this and I keep working on it. Maintaining the Minister of Finance, sending to the market the message that you're going to be there and that you have the people and that you're ready -- you were successful somehow and you have -- and that's very important. If you -- I mean, in Colombia in the last four or five years the Ministers, our colleagues, the economists, we always say there will be appreciation. It has nothing to do and there's nothing that helps more -- now speculation in favor of the peso, the euro, so I keep that advice by Velasco. He told me I wish I would have done more so I can hardly do more. I am in the microphones very often saying I will be there, but I keep my practitioners working there.

In asset bubbles, probably I am relying on what we can do with the central bank in interest rate and credit policies. And basically in the more distant future, I think the crucial issue is about the sources of growth and which distortions you can remove from the economy in its existing shape. So in Colombia I think we have a story which I finish. We have a story based on the bottlenecks of the economy, removing these bottlenecks. The first bottleneck is, of course, finishing the securitization. The second is infrastructure. The third is agribusiness. Colombia is the only big country of Latin America that has not had an agricultural revolution because of the war and internal conflict so we have an amazing possibility in our countryside for having another boom that could last ten years, let's say, what Chile did 25 years ago, and Argentina and Brazil and Peru and Mexico, we can do in the next ten years. Financial deepening as well, and formalization and innovation. If you focus on the current -- on these issues and we can solve them, there's a lot of homework to do there. I think Colombia has -- I do think as Piero said that this could be the beginning of Colombia because we have many distortions and we remove them and problems in the concession system for infrastructure, et cetera, in the agribusiness, if we do what the other -- what our peers in Latin America have done for the last 25 years in this sector I just mentioned which is the one we call growth, I think Colombia as the gate can be the gate of growth between 5 and 7 on average, around 6 percent of growth. We don't aim for anything like that because of sustainable growth.

So I think that the story for Colombia is very positive, but my conclusion would be in the short term, your macro issue is the crucial thing and in the long term, your growth story is the crucial thing. So we try to get both things right. Thank you.

MR. CÁRDENAS: Thank you very much. We do have time for two questions. I think it would be unfair with these very prominent speakers not to say anything, so if any of you have a -- is there a -- please introduce yourself.

SPEAKER: Thank you. I'm a financial reporter from a Chinese magazine, which is a business economics magazine. And my question would be so in the financial recovery session, different countries, especially China and Australia, we have already increased our cointerest rate several times, but the States still has the same monetary policy. So what would be the impact towards them letting America and what's your government going to do? Thanks.

MR. CÁRDENAS: Thank you. Anyone else want to jump in? Yes?

SPEAKER: Hi. My question is why when you intervene you emphasize the fact that the amount that you are going to intervene each time in contrast of not saying anything to the market?

MR. CÁRDENAS: All right. Anyone else? Yes?

MS. ROBITAILLE: Hi, I'm Patrice Robitaille. I'm from the Federal Reserve, but I'm not in the domestic division so I don't know -- don't ask me about monetary policy. But the question for José de Gregorio was concerning the graph that had the interest rate differentials, which I thought was interesting, but I couldn't see the scale. So those looked like ex post interest rates, and they're not adjusted for risk premiums. I don't know if you've tried doing that. I'm sure they'd be much smaller because the inflation risk premium would have been pretty large in Chile in the early 1990s I would imagine.

MR. CÁRDENAS: Let me ask Juan Carlos Echeverry. I really like what you said about the amount of optimal criticism that one needs at home. I think that's a very good point and always to be a little bit agnostic and skeptical about these tings. You did not mention in your presentation the recent upgrading in Colombia's rating and the fact that Colombia is now investment grade and what could this mean from the point of view of precisely the topics we're talking -- in the short run -- in terms of the exchange rate pressures, et cetera. So any -- do you foresee that in the short run we're going to have to deal with the situation that it's harder than what you had to deal in the first seven months? So in other words, do you foresee that you have to change the team and bring now the guys that are making the money, the know-hows in the legislation? So I don't know which one of you wants to take the question on China.

MR. ECHEVERRY: China is not China. Many countries are increasing interest rate and the U.S. still have a low interest rate. But that's what I said in my presentation, I think what's important is the difference. Of course, a part of the money that transmissions make is not the effect only the cost of credit, it also affects the exchange rate. But the magnitudes are not thinking that we are really having a huge appreciation of the currency. The minders are under control, and if they are not under control, you can do things. And you can do, for example, exchange rate intervention regarding to your question. You asked me why you are now exactly $50 million a day. Even at the beginning we set the time. Now we change the time in the morning because sometimes the worst kind of too excessive rule based so we change it. Why? Because how intervention affects the exchange rate. So I don't think -- I think that there are two, you could say two stories about intervention. There are many, but one is that the large amount basically changed the relative stocks of domestic currency and foreign currency available. So what you're doing is just by buying the stock, changing the relative value of the dollar with a peso. That's supply and demand, let's say. You need to tell some stories about the imperfect substitution or some theory because either way, generally in theory, sterilized intervention is ineffective in a well functioning, perfect financial market. It's very easy to say today the financial markets are not perfect.

Then there is a story affecting the risk premium. But affecting the risk premium is too tiny. It's too tiny like saying you can change the risk premium 50 basis points, half a basis point, but that's a two-, three-month of monetary policy. So it's very minor. So first of all, just playing around during the day, I don't think that's too effective. Second, you give a very bad signal, and it's that you worry because the day that you start selling and buying, you are indicating some objective for exchange rate. And that contaminates your decision of monetary policy. So if you want to really be able to run monetary policy independently, you have to have a very rule-based intervention. We even announced the program of sterilization. Everything is fully announced. We can suspend it. We can do some changes, but in general, we much prefer the rule based because first, there is no difference in effectiveness in terms of affecting the exchange rate and second, because it provides monetary policy independence.

And the second question and the final question was regarding -- yeah, this is a tale that I asked yesterday. Now because I will show these. If you go by my risk premium, there are some differences, but if you go by ex post changes in the exchange rate, it was much higher than differential because exchange rate in Chile the peso was strengthened and very sharply. So you have to add like 3 or 4 percentage points a year.

MR. DE GREGORIO: Since we have the same announced intervention, I will also comment on the show of why this $20 million every day, very boring type of intervention. First, because it works. It has worked three times in the last eight years and then the central bank was very eloquent in saying this type of thing works. But basically because speculators are not that smart and that complicated and that sophisticated. If you are bringing this amount of dollars as government as a capital control, the oil state-owned company is also bringing in the -- so it's clearly the signal is absolutely clear and then the speculators will go with you. You're just filling up the swimming pool so they are jumping. So there are two ways to empty the pool, which is one is the government saying I'm going to keep this money abroad, but this is fiscal and that's one thing. And the other one is besides that, if it works a lot, if your central bank says on every day I will keep also instructing and drying up the money. That works only for us -- I don't know in Chile -- but it works only if we have also macroprudential policies that are crucial. You mentioned that, that is critical. Came in October advocating capital controls in Colombia, and there was like 17 measures. Out of that we have already 15 in place. Found something one year ago. We have that in place since five years ago. Probably Colombia will write the papers, but the instruments are there from a long time ago.

So if you have the macroprudential regulations for your financial system, so only the real sector is the one basis point waiting. And we track almost every company in Colombia. But on the real sector, if you send a signal from the fiscal -- from the central bank in the same direction, you are affective. So it's not -- only we have this framework of very strong macroprudential policies in your financial sectors. Otherwise the size of intervention becomes humongous and very complicated. And you have the fiscal front also fixed. The very, very announced and preannounced and boring type of intervention I don't think works. I don't think in a vacuum that works, of course.

And, finally, we expect to have an investment grade issued by Moody's and by Fitch during this year at some point. And, of course, that's complicating things, but we can -- what I say about the exchange rate is that we are not going to fight against the trend appreciation. We're fighting against this bubble appreciation that's happening, but we don't fight a trend appreciation. And improvements in the ratings are trend deep things, so I will note fight against those things. I welcome them, and in fact, going to exchange rate will be showing them and we'll have to live with that.

MR. CÁRDENAS: All right. Well, thank you very much. It's been a great session. I think one thing you can know about this region is that these two gentlemen here pass the Arminio Fraga's test and the Arminio Fraga's test is that since we don't have a textbook that really tells us what to do, we have to go with a simple rule, which is the blush test, which is you do things that don't make you look blushed when you announce them. These gentlemen will never do things that are -- things that the markets could consider detrimental. But they're pragmatic and that pragmatism, I think, is very much in order in a region that has tremendous challenges and has to really manage the current conditions before you can actually say that it has accomplished what we all want, which is the long-lasting growth that will make this the decade of the region. So that pragmatism is always very handy and very valuable when it comes with good analyses.

So thank you for coming, and thank you for sharing with us your thoughts about challenges.

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I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

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Expires: November 30, 2012