# THE BROOKINGS INSTITUTION

# CORPORATE DEBT IN EMERGING ECONOMIES

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#### Moderator:

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### PROCEEDINGS

MR. SY: Thank you everybody for making it this morning at Brookings and welcome. I think this is a very good choice. I went through this report and I think it's really worth the read. So my name is Amadou Sy and I'm a Senior Fellow and a Director of the Africa Growth Initiative here at Brookings. It's a pleasure for me to introduce really a phenomenal panel here today to discuss this new report, corporate debt in emerging economies, a threat to financial stability?

So let me introduce the panelist. First, we have Sebnem, I hope I've pronounced it correctly.

MS. KALEMLI-OZCAN: Yes.

MR. SY: Who is the Neil Moskowitz Endowed Professor of Economics at the University of Maryland, College Park, and is also a research associate at the NBR and at the CEPR too. Sebnem has worked at the World Bank, at the IMF, and has received a Marie Curry IRG prize in 2008 for her research in European Financial Integration. I had to shorten the resume.

I have also Mr. Malcom Knight. If you have been following global financial markets you have certainly read his papers. I used to look at the BIS papers for Central Bank governors and deputy governors, and read some of his papers there. He served as general manager and CEO at the BIS, has been senior deputy governor of the Bank of Canada, and vice chairman of Deutsche Bank. He has also been senior official at the IMF, and he's currently a distinguished fellow at the Center for International Governors Innovation which is also involved in this report, so we have to thank them.

Professor Steph Cecchetti. I'm sure that when you were looking at the discussion about BASIL-3 you have read some of his papers too because he was serving as the head of the Monetary and Economic Department at the BIS in BASIL. Currently

he's professor of international economics at Brandeis. He's published widely. His has worked with the BASIL committee on banking supervision and the Financial Stability Board. If you remember, like post-crisis, after 2008 and when we were in the midst of the crisis, these two committees did a tremendous job, really trying to see how we can fix global regulation, global supervision and so on.

Last, but not least, we have our own Doug Elliot here who is a fellow at economic studies at the Brookings Institution, and is a member of the Initiative in Business and Public Policy, and has a long career in the private sector including two decades, principally at J.P. Morgan.

With this, let me open the floor. First, I'll let Sebnem introduce the report and then we'll go with policy discussions with Steve, and then we'll have the comments from Malcom and Doug. Then I'll open it to the floor. We'll try to finish it at 12:00 because some of us have to travel. Thank you very much. Sabnem?

MS. KALEMIL-OZCAN: Great. Thank you so much and thank you all so much for coming. Let me introduce the report, making two key points. Highlighting two key points of the reports in my next several minutes. The first point is that at the current junction several emerging market countries are vulnerable to a shift in global funding conditions. This is because of their external borrowing that they have engaged in the last five years. The second point that we try to highlight is when we say these several emerging market countries are vulnerable we are focusing on their corporate sectors. This is due to the existing mismatch on the corporate sector balance sheets in terms of the currency composition of the assists and the liabilities, and also the links of the corporate sector to domestic financial system and the rest of the real economy.

Let me just provide some detail on these two points. During the decade before the global financial crisis, actually, emerging market countries improved their

international balance sheets a lot, and they have done that through current account surpluses, reserve accumulations, shifting from debt to equity funding. Unfortunately, during the last five years this has reversed due to several domestic and external factors. Several of emerging market countries accumulated external debt since 2010.

Now, we all know the important role of the dollar. That the dollar plays in the global funding conditions. Which, of course, makes U.S. monetary policy central to the changes in the global funding conditions since federal funds rate is directly going to be tied to the availability of the dollar in the global financial markets. Given the upcoming normalization of the U.S. interest rate, this rise in the U.S. interest rate we all expect. This is, of course, going to affect emerging markets that borrow in dollars. That accumulated external debt during the last five years. Especially those countries with poor fundamentals and, you know, tight links to global financial markets. Now, in that case, a change in the exchange rate coming from the depreciation of the domestic currency or appreciation of the dollar clearly is going to affect these corporate sector balance sheets in emerging markets.

Now, when we talk about the external debt of the emerging markets, traditionally we tend to focus on the sovereigns and the banks. Actually, we focus a lot on those two actors the last 20 years since many emerging markets financial crisis came through either a sovereign debt crisis or a financial crisis. We are not seeing in the report that these are still not important, of course, very important. But in the report we would like to focus now on the corporates and highlight the role of the corporates because we believe corporates can be as important as the sovereigns of the emerging markets and the financial sectors of the emerging markets.

Why is that? Well, to start, if you think about corporates as a large corporates and small corporates. The larger corporates can directly borrow in

international markets through either global banks, international bond markets. The small corporates may or may not do that or they can borrow, of course, through their domestic banking system. As long as they borrow in dollars, at the end of the day, actually, it's not going to make a difference if the money is owed to foreigners or domestic lenders. If it is in the foreign currency terms any depreciation of the domestic currency or appreciation of the dollar is going to highlight the vulnerability of the corporate sector balance sheet in emerging markets and going to be a source of risk for financial stability.

Why is that? We group these risks in four. We call them the maturity risk, currency risk, roll over risk, and speculative risk in the report. The maturity risk is the good old maturity risk where you have short time liabilities and long-term assists. But then this is combined with currency risk then this is more serious now because now the short term liabilities as a firm is in dollars. Where your long term assets are in domestic currency. This is going to lead to the third group of risk that we call rollover risk.

It makes rollover risk more serious. Why? As we all know, investors in emerging markets they're very jittery in general. Their sentiments are very sensitive to both the global funding conditions and the emerging market country fundamentals. Any change in these is going to make the investors very jittery. In that sense, you're a corporate with a lot of dollar debt. When the time comes you want rollover debt. You are going to suffer a rollover risk.

The final group of risk is the speculative risk where the large corporates in emerging markets they act like financial intermediaries through their treasure operations, through (inaudible) activities. We give a lot of examples in the report through big companies like Petrobras. Countries like China, Brazil, India where such corporates actually they're not that different compared to financial intermediaries.

Now, finally, before I close. I said, okay, fine. We see that corporates,

large corporate, small corporates they might engage in risky activity by having short term dollar debt and then trying to fund this to long term assets. They may or may not hedge themselves through derivatives. Why do we care? We care because -- you might think, well, if they are playing the game they know what they're doing. You know? If they go down the road this is their demands and we shouldn't care as the policy makers. We are going to go in detail in the report, and still talk more about this, but let me tell you why we care. We care because these corporates they don't operate in isolation, so they are not like this bunch of guys that operate in an island in their own country. They are linked to their own domestic financial sector, to their own domestic banks, to their own domestic financial intermediaries, and to the rest of the real sector. Right?

True to vertical production change and vertical supply chains, if several of these corporates fail this is going to affect the production both in their own country and globally, and through the links of domestic banks and domestic financial sector if their balance sheets are impaired this can affect the bank's balance sheets depending on what are they rolling over, which assets they are liquidating, what type of nonperforming loans they're engaging. And also if they're -- even they're hedging the currency risk on their debt through derivatives and their domestic bank becomes the counterparty in this during the settlement process. Still, this is going to have an impact on the domestic banking system.

If they lost their credit partners in the financial bond markets, they can't switch their domestic banking system. This might crowd out the small firms in the country. So we highlight many, many direct and indirect channels like that in the report where corporates' foreign currency debt in emerging markets are real, and they are of concern, and they are risky given their links to their domestic financial institutions, and the rest of the economy.

But, of course, there are ways to deal with it, and let me stop here and let Steph tell you more about those.

MR. SY: Yes. Thank you, Sebnem. So now that the risks have been identified and somewhat measured what do we do? How do we manage them? Steve will tell us all about it.

MR. CECCHETTI: Thank you very much, Amadou. Also, let me thank Brookings Institution and the CG for the sponsorship of this group that I am now part of.

Let me start by backing up a tiny bit and saying that I think that there is still a danger in what is happening after the crisis. That is that it's easy to make a list of all the things that are risky. The trick is to find the ones that actually matter because you don't want to take action against everything. I'm finding that this is becoming something of a problem. There are a lot of organizations out there that just try to make this list, and for some reason they're concerned if their list isn't long enough. So I think we have to discipline ourselves in how long this list should be.

So one of the purposes of this report is to take seriously the possibility that this is a risk, and then ask, first of all, is it? Then what would you do about? If it is, where is it a risk? I think it's pretty clear from the report, and as Sebnem said, that it's not going to be a risk everywhere. I think that's a key message to take away is that in some countries there are problems, but in other countries there are not. It's not necessarily widespread. Because if you look globally the numbers just aren't big enough to sustain the fact that there's a global emerging market problem. There may be problems in some isolated countries, and I think that we have interesting case studies. One of them which Sebnem did on Turkey which I think highlights some problems that could exist there, Vera Latria, who wasn't able to be here today, was working on India where there also might be some problems.

Now, the other thing to keep in mind is that as a general rule we believe that the shift in financing from banks to markets is a good thing. We feel that that's something that is good for an economy. It allows both for market discipline, and also for multiple sources of funding, and it should improve capital allocation and efficiency. The thing to keep in mind when you are advocating, as I do, increased market participation and less bank-based finance is that you're shifting away from very high levels of monitoring that banks do for their loans to much lower levels of monitoring that are done even in the most intensive cases by markets of bonds that are issued. So we're encouraging it.

Now, to get to the policy implications of the specific issues that we look at in the report, just to remind you of the list that Sebnem just gave you. There are a set of risks. Then there are a set of policy implications that arise from those risks. So the risks were both direct and indirect. The direct risks come from domestic bank credit losses that might accrue should an emerging market corporate that has issued foreign currency debt run into trouble. That can come both from lending operations of a traditional type of from securities' ownership that the bank has.

The second one is that the bank could, in principle, a domestic bank could face a liability run that comes as a consequence of the fact that the emerging market corporate is short of liquidity to make payment on the bonds that it has to service. The third which Sebnem mentioned is the fact that if the large corporates can't issue bonds they come back to the banks. They're priority borrowers, from the bank's point of view, and the banks then use up their balance sheet lending to large corporates rather than to small and medium-sized enterprises. The fourth one is counterparty risk that arises from derivatives transactions.

On the indirect side there are a set of things that are traditional. Some of

them are under traditional macroeconomic risks. Things that would affect either the aggregate demand or aggregate supply in the economy. The one that I think is separate from that is the fact that these large -- the large non -- apparently, I should say, non-financial emerging market corporates look more like some of the large American corporates in the fact that they have huge financing arms that are, in fact, acting as intermediaries. And so for everybody in this room problem knows about things like G.E. Capital and GMAC and the like.

So the question is what do you do about this? Our argument in the report is that most of this -- well, first of all, that you cannot directly manage the -- as a regulator -- policymaker, you cannot directly manage the balance sheets of a non-financial corporate, at least not in the environment that we have set up in most of our jurisdictions in the world. But the concern is, again as Sebnem emphasized, the concern is the ties that these corporates have first to the financial sector and secondly to the real economy.

On the first of these on the direct channels, we emphasize three things. First, regulatory buffers. Things like risk weighting, concentrating limits, those are going to be on the asset side, and run-off rates on the liability side. These things could, as we suggest in the report, they could be scaled by things like the FX beta of a firm, so the more sensitive its equity is to movements in the exchange rate in the country taking into account the movements of other equity markets and higher controls. The higher you might want to make its risk weight. The lower its concentration ratio and the higher the runoff rate on its liabilities.

The second thing that we discuss is stress testing. There the question is whether or not the stress tests can actually be said in ways that would ensure that the banks are going to hold sufficient buffers, again, against potential losses. The third thing

has to do with the derivatives' market. Here what we emphasize is a need of central clearing. This is a rather esoteric thing, for those of you that haven't been deep into this, but there's something called a final user exemption that's being granted in a number of jurisdictions. The person that is the final user, in this case, would be the corporate, and the problem that would arise that we have identified, and that I think is the risk, is that corporate would not be able to make good on its part of the derivative contract, and that means that you can't allow the final user exemption because margin is the guard, is the buffer against the default of a derivative's counterparty. At least from speaking for myself, I've always been against the final user exemption and now I'm even more against it than I was before.

On SME lending, this is a complex thing. There are solutions that seem to exist, but they seem to be in the form of subsidies, and you have to ask very hard questions about whether or not the solution is worse than the problem when you do those sorts of things.

Finally, on the indirect risks. Here the primary one, although on the macro ones I think that there the issue is, and Sebnem already said, if you're worried about sovereigns you've got to keep the sovereign debt ratios low, and if you're worried about macroeconomic impacts on aggregate demand you have to have not only fiscal space to act, but also monetary policy has to be able to respond. The issue arises, as it does in every jurisdiction, on what to do about what end up being non-bank that are providing banking services.

So banking services are a whole set of things: credit, liquidity, maturity, transformation activities. The question is, and it is a question, I think, for everyone, but it's a question here as well, and that is, is there a way to do something that's more, what I would term, functional regulation than regulation by legal form of organization? So can

we find a way to ensure that what we currently call bank regulations apply to everyone who is engaged in bank-like activities. So the question is not whether or not you are called a bank, but what you're doing is something that a bank does. So do you have a balance sheet that has more liquid, shorter maturity, lower risk liabilities than your assets.

In some cases, these organizations do have that. It's certainly the case that G.E. Capital and GMAC have that and the money market mutual funds, so maybe they should have to hold capital. I would argue they should. Maybe they should have to meet liquidity coverage ratios and the like. So let me stop there.

MR. SY: So we'll have a chance to come back to these policy recommendations during the Q&A session. But now let me give some outsider's perspective, so on the panel we have two distinguished gentleman that are not authors and will bring us some fresh perspective. We'll go first with Doug and then with Malcolm.

MR. ELLIOTT: I'm glad that my principle qualification here is I wasn't one of the authors. It's always good to come in with a comparative advantage. Having said that, let me start by saying I think the report is a real public service. That is, this is an important area of international finance that has not received enough attention. I think they do a very nice job of compiling the data, applying a sound theoretical framework, and doing some fairly clever analysis. Things like the FX beta that was mentioned.

Now, that's about all that is positive that I'm going to say about the report because I think discussants are more useful where they point out areas where they have questions or concerns. So I really do think it's a really good report. I want to emphasize that again. Now, here are the things that I'd like to focus on that I'm more concerned about.

First, to caricature a little bit as background. I'd say there are three broad assertions about policy. One set of assertions is that there should be better risk

measurement. I'll come back to each of these. A second is that you want to protect the financial intermediaries adequately from the risks that are generated by the corporate debt. The third, a little more murkily, is that it may be that you want to discourage non-financials from taking excessive risk, certainly if they're acting as kind of shadow banks.

Now, my first overall concern is you notice every one of those three points is about risk. Now, Steve did a better job than the written report about emphasizing that there are benefits from this type of international corporate debt. I think the report should make that significantly more clear than it does because you could easily walk away from the written report thinking, "We've got to shut this thing down," or at least we need to keep on a lot of constraints and regulatory burdens.

That concerns me because I think in regulation of this type we need to look at costs and benefits. There are a number of benefits to this. Also, when you do a cost/benefit analysis you have to compare it to what was the alternative. So, for example, I don't recall anything in the written report which says, although there are clearly funding risks from borrowing internationally in dollars, by the way, there are also funding risks from borrowing in your local currency from your local banks. You can have a credit crunch or a bank financial crisis and the money can cease to be available. You could have circumstances in which it's better that the corporates had actually borrowed internationally, because those markets may continue to function in a circumstance in which the local market stops. So I don't know what the right balance is here, but I think there should be more discussion in here about what those balances are.

Okay. Risk measurement. It's impossible to argue against better risk measurement. I'm in favor of that. I also believe that this is a particular area where there hasn't been enough attention paid. I think that's a big positive of this report. They have some interesting ideas about how to measure the risk better. I'm broadly in favor of that.

I think it needs more flushing out, but it's definitely a positive contribution.

Now in terms of policy implications for protecting the financial intermediaries because as Steve, I think, well, really both the authors very well explained, if these corporates were sort of off on an island of their own we probably wouldn't be having a discussion here about it. It's their ties to the larger economy, and particularly to the financial institutions and markets where they have the real potential for contagion. So I would certainly agree, again, we ought to make sure that banks and other financial intermediaries are adequately protected. But some of the policy ideas, I think, are more difficult to do and certainly need more detail.

So both for risk weights and for the equivalent with the liquidity coverage ratio there's a clear call to include an analysis of the foreign exchange risk as part of this. That may be right, but it's a matter of emphasis. Risk rates and liquidity calculations are kind of an average of many different factors that we see as important. It's not demonstrable yet to me that the foreign exchange risk has risen to the level that we need to be explicitly doing this, especially since it's a very hard thing to do. But I could be convinced, and certainly I think we need to pay attention.

There's also an excessively, to my mind, positive endorsement of central clearing. I, in general, I'm in favor of central clearing. I think it's a positive step forward, but there happen to be a lot of problems with central clearing. Including that we're likely creating a series of too big to fail institutions that each of whom could have a very large effect on the financial system. When you add to that with emerging markets that you're talking about a central counterparty that's in another country under somebody else's regulatory regime there are issues there. Also, CCPs work better when you have simple, straightforward instruments that we understand. When you start having, let's say it's a dollar borrowing, but it's done under local law or something. You can get oddities.

I like central clearing. I think the endorsement was a little too ringing. Especially since several of these points are mentioned and simply said, we won't discuss them further here. There's a good point about the indirect effect on lending to small and medium size enterprises. There isn't an actual recommendation. My sense would be that there was a recognition by the authors that this is an issue that could matter. They were worried about recommendations that other people have been making. In particular, providing subsidies for SMEs, and they directly addressed it.

But as far as I can tell, they don't actually have a positive recommendation, at least in any real detail. There may not be a thing to do about it. I, personally, think there probably isn't. I think the best you can do is make sure your overall financial setup is better and works for SMEs. But that's an issue.

In the written report there's a lot of discussion of corporations acting as, but to their credit they don't call shadow banks, because I hate the term, but it is the term most of of use. Acting as financial intermediaries that don't fall under bank regulation. A call for looking at activities rather than entities. At some level this has to be right, of course. That is if you have non-financial corporations that are really acting as financial corporations in a significant way you need to bring them inside the regulatory perimeter that we talk about and treat them, to some extent, with bank-like regulation.

I don't think there's sufficient discussion though of the fact that the most significant things we do are capital and liquidity requirements for financial institutions, and those aren't about activities. Those are about entities. Because we're worried that the entity may go under and not be able to fulfill its obligations. This is one of the trickiest things in dealing with shadow banks. How do you meld together a focus on activities with a recognition that the entities that do them are very important in their own right, and you need to look at those?

I've gone already too long, so let me just say again. It's an excellent, useful report, dispute my comments. I just think there needs to be more study and more fleshing out on the recommendations.

MR. SY: Thanks, Doug. I think it gives you an idea of the distance that you have from going from policy recommendations to actually implementing the recommendations, especially when there's no crisis. So trying to do it when there's no crisis is something I think, at least the report, has some value because it forces us to think about these issues right now, and hopefully avoid a crisis. So last but not least, Mr. Knight.

MR. KNIGHT: Thanks, Amadou. It's a great pleasure to be here. Well, over a year now the governments in emerging market countries have had to cope with pretty large withdraws of capital in forms of equity and debt from their economies. The numbers are very large relative to financial markets and the countries' concern. They're not large on a global scale. What I think is very useful in this paper is that it does give us a basis for trying to look at what are the implications of this major development for emerging economies, major negative development. What are the implications for macroeconomic and macro financial policies?

The thing I would say here is that the current funding challenges of corporates, and indeed sovereigns, in emerging economies are clearly very challenging. But they're nothing like the periods of sudden stops and capital surges that occurred in the past when the system operated purely through the international banking system. You can think of the huge inflows of capital to the Latin American countries in the 70s that basically negative real interest rates after the oil price increase. The problem of the sudden stop to Mexico in 1994. Particularly, the most recent memory, I guess, is the Asian crisis. The Asian financial crisis of 1997 - 1999.

Now, in the past when countries -- emerging economies suffered those experiences they introduced batteries of capital controls and ex-post tax systems and so on. But the emerging economies, the key ones, learned a really important lesson, particularly from the Asian financial crisis. They learned that in order to assure a flow of credit by international investors, a flow of funding they had to show that their economic management was prudent. And so over the years, after 1999, a number of emerging market economies engaged in very orthodox fiscal policies. Let their exchange rates float, managed their foreign exchange rates flexibly, and thereby gained credibility that their financial systems would be open not only to inflows, but also to outflows when the weather became bad.

So what we're seeing now isn't like the past. So far, and this could change if the Chinese authorities do more inept things in their financial markets, but what we're seeing now is a very -- it's large, but it's an orderly reallocation of the asset portfolios of international investors away from a number of emerging economies. Particularly those that are primary commodity producers. So this rotation is based on fundamentals. It's what investors should do if they're looking at emerging economy corporate debt and equity as an asset class and a global portfolio. The reason they're holding it is it because it's supposed to yield good returns and have a lot correlation with advanced economies.

Now they're seeing that the fundamentals say probably low commodity prices for a substantial period of time. U.S. authorities may, someday, raise interest rates, etcetera. So we're seeing a big rotation out. This is an uncomfortable time, I'm not denying that. But let's look at where we are. The previous period of very heavy capital inflows, which were caused by what was essentially a distortion for these economies' point of view, very low interest rates in the reserve center countries, and very high

demand for primary commodities from China and other countries.

It was virtually impossible to sterilize that, so these countries had a situation where their exchange rates moved to levels which were probably far above what they were comfortable with in real terms in the period after the financial crisis and right up until about a year and a half ago. That hollowed out manufacturing industries in these countries. I could name lots of names, but Brazil is a classic example of the deleterious effects of overvaluation. So that had Dutch disease which was caused from outside.

Now we see a situation where the capital is being withdrawn, I think for very sensible reasons from an international investor's point of view, and the exchange rates are under pressure. The IMF also predicts that the current account position, the aggregate current account position of emerging market economies as a group, which was in surplus until very recently, is not going to go into deficit. So for the first time instead of having a surplus on the current account and a surplus on the private capital account and reserve increases, it is said we're going to have an overall balance of payments deficit.

What this means is that these difficult conditions are going to persist for some time. So the last question, but the most important one is what should emerging economies do in these conditions? I think there really are four recommendations here, two of which are pretty standard, but the other two may be less so. The first is that when something is cheap you buy into more of it. So when interest rates go down both the sovereigns and the corporates borrow more. We've seen that from all over.

There's a very good study by the IMF and its GFSR in September which shows that the leverage of corporates in the emerging market economies appears to have gone up pretty significantly. That's not necessarily a huge risk, but it's certainly a flashing warning light.

So what is crucial here is for the authorities to restore confidence that

they are maintaining prudent fiscal policies which will give sustainable fiscal positions in the long run. Then any slippage is corrected. Secondly, they have to maintain monetary policies which ensure that they can maintain relatively low and stable and predictable inflation of consumer prices in their own economies. That's been a problem in countries in the past with depreciating exchange rates one has to be careful about that. Those are very standard recommendations. Everybody would probably agree with them.

But I have two more which I think are just as important and which where maybe there's less agreement. The third is they have to manage their exchange rates very flexibly. Why? Because they have been, in many cases, overvalued. And so the recommendation of many experts, that they should use reserves to limit the depreciation of their currencies I think is totally wrong. I actually don't even think they should intervene to smooth. That's something we could talk about later. So don't use reserves to counter this until you're absolutely sure that your real exchange rate has fallen to a level that makes industries you've like to have in the long run competitive.

The fourth relates directly to the report. That is that a number of emerging market economies need to institute pretty close, real time monitoring of the foreign exchange exposures, and the leverage of key, large domestic non-financial corporations in their country just so they can see how to manage these things in the short run. That's a macro prudential tool which we all say we're developing, but I think it's particularly important in emerging economies in these circumstances. I'll stop there.

MR. SY: Thank you very much. I don't know if you would like to react now before I open it to the floor or we just go straight.

MS. KALEMLI-OZCAN: I can take a couple points and then maybe Steve. Great comments. Thank you so much. We should definitely incorporate several of these things. But let me clarify these. So both in your discussions, I mean, you know,

in the case of Malcom kind of a very macro perspective and in the case of Doug a very kind of this really non-financial corporates, but the ones in the market perspective.

So let me clarify a couple things here. So we are not talking in the report only about these Petrobrases of the world where we can see them, you know, they are listed. They are big. Clearly if they act like a bank, you know, we should think about something about it. But there are also a lot of small firms in these countries where it's not going to be straightforward, for example, they won't be in our FX beta exercise. But it's not going to be straightforward to see what they are doing. They are piling up very much the dollar debt.

I would like to remind you after the Asian crisis, I know Malcom said, yes, this is not like that. That was a different period. I fully agree. I mean, this was a fixed exchange (inaudible), but at the end of the day when things happen in Asia we were all caught by surprise because we didn't realize the firms were not in the market accumulated all this foreign debt. This is very important because these forms matter for the output. I mean, forget about emerging markets, if you look at European countries. European countries, SMEs, account for 70% of the output, 70%. This statistic is the exact opposite of the United States. So this is a very important statistic.

Southern Europe, which I actually think they are emerging markets, they -- I mean, the SMEs, when we say SMEs, like firms with less than 200 employees where most of them are not going to (inaudible). They matter a lot for real economy. If these guys really creating these risk on their balance sheets, I believe actually this is very important. In emerging markets this is going to be even more important. So that's one point I would like to clarify. So this is really not just about this kind of big conglomerate who acts as a bank and we should worry about it. It's really about a lot of small firms which is going to be very important for the real economy.

The second point I would like to clarify is, I mean, Malcolm put it very lightly, so we worry about current account deficits when it is twin deficit. Right? We went through this. If they stay put in terms of fiscal prudence, if the fiscal policy is great, and the monetary policy say put, let's say inflation targeting, because this is what emerging markets are doing, and then don't give into depreciation pressure. I mean, again, let me clarify. This is not how emerging markets operate. Yes, they float now. It is not the old days like with American Asia, but we know the fear of floating. Fear of floating is a very much factor of life. Emerging market countries they never purely float like Canada and U.S. Right? They manage their exchange rates and in that sense they can never stay true to their monetary policy inflation targeting when there's exchange depreciation.

We see what is happening right now. Right? The key emerging markets they almost end of their inflation target. I mean, Turkey, for example, 6% point of their target. Why? Because they have a lien against the depreciating currency. Given deficit, fiscal prudence, I fully agree, but it is not that easy when you start going down this road to have this strict fiscal discipline monetary policy, only inflation targeting, and that's just not adjusting what is going on on the exchange rate dimensions. It's very for emerging market central bankers. And this is the key dilemma of the emerging market central bankers, so I believe in this sense, corporate sector, foreign currency liabilities, especially in terms of the small firms which makes a big part of the economy is something very important, and something we should actually be worried about.

MR. CECCHETTI: I just want to make a few really quick points. First of all, I think I agree with almost everything both of you said, so I think that part of it's easy.

MR. ELLIOT: You can stop there if you want.

MR. CECCHETTI: I'm going to highlight a few. So first of all, I think Malcom, your point that we really need to think much more about debt and leverage, not

just in this circumstance, but more generally, I think, is absolutely right. Doug, I, obviously, I said in my initial comments I was talking about benefits as well. I do think that the benefits are likely to outweigh the costs in these circumstances as long as you're careful.

I think that you mentioned a bunch of details that we were suggesting. I think it's an empirical question in the end as to whether or not this stuff rises to the level of being included in things like risk weights or concentration limits or run-off rates for liabilities. There, I would suggest, many people, certainly all of us up here and out there you've worked with people from all over the world. I would just say that my observation is it depends a lot on where you're from how you answer a question like that. So I spent all my time being an American in international organizations saying, "What are you people worried about? Everything's going to be fine. It's always fine." To which the answer of some people is, "No, it's not always fine and I'm worried." I said, "Well, I just can't live my life like that because I cannot get up every morning and ask myself did I have a worse nightmare last night than I had the before, and so now do I have even more things to be worried about?"

When we were writing this report I asked all of the people that were involved at one point, Sebnem probably remembers. I said, if you were going to make a list of the ten things you were most worried about would this rise to the level of being on that list, and the emerging markets' author said, "Absolutely," and the other one said, "I'm not so sure," and I said, "No." But that's another story.

MR. SY: So before I open it to the floor I just have one remark of my own. It's the fact that when I look at the policy recommendations the focus seems to be more on banking regulation, prudential regulation, and so on. But having, in my previous life, gone to ISCO meetings and so on my question is that isn't there also room for this

issue of basically market discipline in the equity markets? I mean, if I'm a shareholder of a company that is loading up on FX debt maybe I should be nervous? Is it an issue of transparency, an issue of governance? Even if it is a privately held firm maybe if the country has good governance practices and so on something can be done there. So maybe isn't there an angle from that side?

MR. KNIGHT: Can I come in on that, Amadou? I think in terms of global investors' holding of corporate equity in emerging markets there's certainly market discipline because they're automatically built in. You can't get out without selling at a huge discount if there's a problem in the corporation or more broadly in the economy. So market discipline's very important in the equity market.

But in the corporate debt market I think the problem is, as I alluded to in my comments, there's been a huge distortion. It's been very cheap to borrow abroad. Cheaper, probably, cheaper in many cases, we know, particularly for larger EME corporations to borrow abroad than to borrow from their own domestic banking systems. This is an area where because of the outside distortion, primarily, I would say the market discipline hasn't worked.

I'd just make one final point. I think another place where market discipline isn't working yet, and it comes out very well in the case studies in the paper of India and Turkey is that the instruments by which SMEs borrow, and larger corporations in those countries borrow abroad are really pretty cumbersome instruments that look like the kinds of things that were invented back in the time when there were huge batteries of capital controls.

Now, this creates, I think, a very -- still a red line between corporations that have a name that allows them to borrow abroad and SMEs. So we're not getting some of the advantages that should come from this because of these really very abstruse

and non-transparent instruments.

MS. KALEMLI-OZCAN: Can I just say one more thing here? MR. SY: Yes, sure. Go ahead.

MS. KALEMLI-OZCAN: I full agree with Malcolm, and I also I fully agree both with Doug and Steve on this. This is a good thing that we are switching to international bond markets from my own domestic bank, true. But at the same time, and it is cheaper. That's definitely true. But at the same time there are also a lot of firms that still cannot directly access that market and borrowing from their domestic banks.

Now, let me tell you, it is also cheaper to borrow from your own domestic banks in foreign currency. I have this data. I look at it, so you pay much more interest rate on the same loan, show much less collateral compared to domestic currency loans. So I get this question all the time, if these guys are not hedging why they are doing it? It is cheaper. Through your own domestic bank too, but then image the possibilities when this thing starts unraveling and going down the road.

MR. SY: I think this is really a good point. So, we'll open it. I'll start with the lady here. Please identify yourself. If you can just have a quick question, so we can have everybody, and then move to the gentleman there. I'll take three questions.

MS. WELLS: Hi. Good morning. My name is Dr. Donna Wells. I'm a mathematician economist. Can we talk about mechanism in place to alert American firms to procurement opportunities in the developing world? Thank you.

MS. SY: There was a second question there, and the third question will be here and we'll have another round.

MR. IYUR: Seyam Iyur. I used to be a director in the World Bank in the 90s. In '94 we were called up to Mr. Preston's office because in December '94 capital had flown out of Mexico, and eventually they asked me to go and lead a team to help

them restructure their financial system. Long before '94, the banks had over lent to the corporations and rolled the loans over, rolled them over, refinanced, refinanced, but didn't classify them in the way they should have been, so the banks were way undercapitalized, so you don't even need to wait for a crisis. I think the crisis is happening below the surface because banks are afraid of their corporations.

Then I was asked to lead the World Bank team to Korea in 1997. Somebody talked about leverage. Some of the corporations in Korea, and Korea anybody who employees 500 or less people is a small or medium enterprise. It's only above 500 that are called real enterprises, conglomerates. 2700%. The average leverage ratio of these corporations was somewhere of the order of -- they said -- we did audits on all these banks and their portfolios, 500% to 600%. So I think the point came up here about leverage. There should be some, in terms of policy recommendations, some system whereby, in Korea we asked them to do a corporate restructuring agreement among the banks which the banks and their corporations would all enforce, implement. So something like that, but we can come back later.

MR. SY: The last question for the first round is here in the front.

MR. POWELL: Andy Powell from the IDB. Well, I enjoyed the report very much. I thought it was very interesting, and we've been working on similar things for quite some time now. I wanted to -- I think Steph put his finger on it when he said the risks are very different in different places. I think that's true. If you look around the world this is not a kind of one size fits all kind of risk.

For example, if you're in a country where the firms are acting like financial intermediaries then, you know, there may not be so much liquidity risks on the corporate balance sheet because, by definition, they've kept the funds they've raised as liquid assets. Of course, they may have currency risks. Then you may worry about the

risk on the banking sector, as you pointed out, if some of the liquid assets are held in the banking system then you worry about the liquidity risk there. If you're in a country where financial non-corporate -- sorry, non-financial corporates have not been acting like financial intermediaries, but leverage has gone up. I mean, corporates have issued debt in dollars all over the world, so then you're worried more about traditional corporate risks over indebtedness and so forth.

In a recent paper, which you're kind enough to quote, we find that corporates are basically acting like financial intermediaries in countries that have capital controls. So there seems to be -- it's kind of like an arbitrage of capital controls. There they're taking the role of financial intermediaries.

On the liquidity coverage ration I'm a little curious because I think this is significant risk that there's a change in U.S. interest rate policy or whatever, and firms now need the money to repay these bonds that they've issued, but it's not obvious to me that's entirely directly related to the exchange rate of the particular country. It could be just due to the U.S. change in world financial conditions and the corporates decide they want to do something else with the money, so they take the money out of the banking system and do something else with the money. So I'm not quite clear why you'd want to link the coverage ration with the FX beta, but anyway.

MR. SY: Thank you.

MR. POWELL: But I think it's a significant risk we should worry about. MR. CECCHETTI: Let me just start with Andy's point. Obviously, you're report was, by the way very, very helpful for us, so thanks for that. For those of you that are interested in doing more about this I do recommend the IDBs work on this. So give you a little plug there as well.

Again, I think that this is a little bit like what -- it's very similar to your

comment, I think, Doug, about what's the role that this plays and aren't there other things too? And the answer is, yes, and the answer is that the liquidity coverage ratio, I mean, you can have very simple things or you can have pretty complicated things, and how complicated do you really want these things to be. Maybe this is too much. I'm not sure.

You also raise the issue, which I think is an interesting one, we've seen a huge amount of depreciation already in a lot of these countries. Why haven't we seen problems yet? So your answer might be that the reason we haven't seen problems yet is it's going to come when the interest rate goes up because that's going to be what's more critical than the exchange rate. Although, I'm not sure I quite understand that. I'll let the other ones go. I'm not sure what to do.

MS. KALEMLI-OZCAN: I agree. It is harder to do this type of how we should link the affects to these ratios for those guys. One way to go, of course, through the macroprudential policy, but the macroprudential policy is going to go through banks, just be definition. A couple countries actually did this where instead of just trying to link directly their leveraged effects they're linking their production sector like tradable, non-tradable, and then how much -- but, again, this goes through banks, so this will be like the firms borrowing through the banks. But then it's a macro prudential policy where banks shouldn't be lending to the firms over a certain amount, over certain sights if the firm is in the construction sector, let's say. That's something under macro prudential. Turkey did this. Brazil did this.

For the large corporates that do the borrowing themselves directly you have to incorporate this. This is definitely an important question. There, I guess we should watch leverage, but let me tell you. I did a couple papers on leverage looking at both the emerging markets and European countries before the global financial crisis. Especially in the European countries, you will expect that this is going to increase. You

don't see that much of an increase. Sometimes it is hard to measure these things because of firms, like banks, play with these things on their balance sheet. Right? I mean, also hit the banks. We look at these things and then we never see that rise. Right? So only you starting off balance sheet items and everything you see. I'm not sure if it a direct solution to less monetary to leverage. Because we can monitor it and as we find out with the global financial crisis and the banks you may not see much there.

Going back to the other questions. I fully agree. I mean, Mexico's case, Korean case, Turkish case, India, exactly. I agree with your question. There's not much more you can do there. It's very hard. I think with macro prudential policy you can do a lot because you are going to do it through banks, but firms are borrowing at record. Again, a big part of these firms are multinationals, right? It's multinationals, if you somehow manage to restrict their shadow banking activity, I mean, the rest you don't have anything to say. They are not internationals. They can do whatever they want which brings me back to your question, how American firms can be informed.

Multinational American firms actually they are very well-informed, believe me. So any change in the procurement laws in these countries, any changes in FDI taxes they know about it. Now, multinationals, I'm not sure. But several changes. Emerging market countries did because of exactly this reason. Because they want to change the composition of the funding from debt to equity to FDI. Several tax breaks and change in the programs. Multinationals, as far as I know, and I've a lot of research on FDI, they're always very well-informed, but the firms were not multinationals. I don't know.

MR. SY: Alright. So second round. I'd like to take some questions from the back because we've been biased towards the front. So one here from the front. MR. HANSHALL: My name is Tom Hanshall. I used to be at the IFC.

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What I wanted to ask you about was what you think the Federal Reserve should do in terms of the timing of an increase and how high they can go, and what sort of constraints they face? Because this is kind of the elephant in the room, the Federal Reserve. You can talk about all the different risk options for these countries, but if the Fed is extremely aggressive there's a risk that you could have a panic amount, for instance, the people that have money in a fund and they see that the value goes down. You have massive withdraws from these large debt funds, corporate debt funds in the emerging markets. I'm just curious about your views on that.

QUESTIONER: I have a question about SME financing. I used to work with the World Bank prior to my job here. One of the programs we tried to develop was to help public policy to ensure SMEs have access to finance through guaranteed programs, etcetera. I'd like to ask the alters what they think about public policy implications?

MR. CECCHETTI: I'll take the Fed question.MR. KNIGHT: I'd be happy to take the Fed question.MR. CECCHETTI: I'll let you go first.

MR. KNIGHT: On the Fed question, I guess what I would say is that, as I see it, the rotation of foreign investor assets out of emerging economy, that inequity, is a result of the fundamentals, very weak commodity prices, slower growth, slower global growth, etcetera.

In that situation, I think the Fed's communication policy has actually been pretty clear. It said that they need to raise the policy interest rate at a time which is appropriate from the point of view of the U.S. economy but our policy will be data dependent, so if we raise it sooner it might have a lower slope and so forth. So I don't think that that's actually the case here at this time. In fact, that was born out to me at the

meetings of the IMF in Lima two weeks ago, and a number of emerging market governors and finance ministers said, look, from our point of view please just do it because it will reduce the uncertainty to which we're subject. I think, to me, it's really not a major issue.

MR. CECCHETTI: I'll just add a little bit to that. I think, first of all, I agree completely, Malcolm, that the big issue for emerging markets is China and the global commodity slowdown and global growth. Because, otherwise, you wouldn't see all of them going at the same time. You're right. I can point to some countries and I can say, oh, there's a political problem here or there's a particularly severe energy problem there, but I wouldn't see this more, sort of, uniform movement because I think the common element is big.

On the Fed itself, I think that they are -- a number of Central Bank governors that I have heard have made this comment about just do it and stop creating volatility for a while. I have a lot of sympathy for this. I think that what the Fed is doing is, in some ways, it's being a little bit afraid. It creates volatility with the possibility of moving. Then because the volatility's there it doesn't move, and not there's more volatility, so it's backing itself into a bit of a corner. But if they just sort of said, look, every two meetings we're going to go 25 basis points as long as the outlook doesn't move outside of the interquartile range that we have. As long as there isn't a big move, a material change in the outlook we're going to go at some predictable rate than that will take care of a lot of these problems. That also, I think, given the level of knowledge that people have about what's actually going on there's a huge amount of uncertainty that that would be the way to go.

MS. KALEMLI-OZCAN: I think it is not just that the emerging market central bankers are okay, please go ahead because it's much better for us to know this,

but also when you talk to them they put in place several macro prudential policies that worked with the cycle. So it's going to work on the upside and the downside, so they are actually prepared that there can be a tightening in the global funding conditions, and how the buffers are going to work in that case. They did actually a lot. I mean, if you look at the IMF, not this World Economic Outlook, but previous ones these guys recommended all the macro prudential policies.

Then you compare emerging markets to developed countries in the last five or six years. It's like developed countries almost did nothing compared to the emerging markets. They had like several policies in place just for that day. In that sense, the timing of this, especially if is not the humongous increase which we expect it's not going to be, a quarter percentage point is not going to make that big a difference. Although having said that, again, this goes back to the point that not every country's the same. This is going to change from country to country. I full agree.

As I said in my introduction in the beginning, the fundamentals are very important here. So when this thing happens, clearly when the global funding conditions tighten not everybody's going to be affected the same way. The country fundamentals, poor fundamentals versus strong fundamentals is going to be extremely important at that point, so the investors obviously wanting to pick and choose. But when you look at this emerging market corporate sector debt that is not that different actually when you look at several emerging markets. Right? But the effects are going to be different, for sure, given the macro economy.

#### QUESTIONER: (off mic)

MR. CECCHETTI: I don't see the evidence of that. I come from -- I used the write speeches that said this. Always separate the institutional view from the view of the individuals, and I don't see the evidence of this in most places. I don't see risks that

are building up. I think that by most measures risks are actually pretty low in most of the world, in most of the markets, and most of the places. I think we should make a comment about SME lending policy though.

MS. KALEMLI-OZCAN: Let me answer that, although add something very simple here. If you have a current account deficit of 10% you are going to be affected. I mean, let me just put it simply. The dollar gets out of the country you are going to be affected. There is no way around that. So in that sense, country fundamentals is extremely important.

Let me answer the SME question. I think it's very important, but this goes back to Doug's point that when things are good people don't worry about these things because the SME's didn't have any problem of borrowing through their own financial sectors, depending on their size, through outside, the 500 employee size, definition for Korea. Euro official definition is going to be 250. Below that, many emerging countries are going to be less than that. But the point is, this is going to be an issue on the downside. So in terms of emerging markets we didn't see them doing any specifically during this boon because everybody had access to funding. Yes, very small firms do it through trade credit, and then micro enterprises, less than ten employees. Over that you do it through your banks, but nobody had any issue.

On the downside, now what we see a lot in the European context and all the policy action is directly targeting this SME financing. We see that actually a lot can be done. This is what the Europeans have been doing the last couple years. First, we called them, you're trying to twist the arms of the banks around, but it's not really twisting the arms. There are enough incentives to make -- the investment (inaudible) to collapse, especially on the small firm size, so there is actually enough incentives now the ECB's providing to the banks to increase the lending to SMEs both through loans and also

through trade credits.

There can definitely be things to be done. But, again, this is not going -once you have the credit crunch and balance is an issue generally public policy stressing about these things. Not on the upside because nobody has any problem of financing them.

MR. KNIGHT: I'd just like to make one additional comment on that. Wouldn't it be wonderful if we had a below investment grade bond market for SMEs in emerging economies? The scope for that is there and it doesn't really -- I think the authorities can really help a lot. You can help by establishing a domestic commercial paper market. You can help by establishing a good credit ledger in the country. You can help by encouraging SMEs to borrow using relatively transparent instruments that can be analyzed by credit analysts in various countries.

Now, most lending to corporates in emerging economies goes through ETFs the default risks are spread. The problem is, of course, that the credit rating is a not very contestable industry. It's wrapped up by a handful of firms. The risk management institute of the National University of Singapore has been trying to establish a public good credit rating service. These things will happen in time, I believe, but the authorities could do a lot to encourage it by getting the instruments right.

MS. KALEMLI-OZCAN: And let me add, actually, something there. International institutions also like, for example, IFC has been on the forefront of developing the local currency corporate bond markets in many emerging market countries, and the EBRD right now, European Bank of Reconstruction and Development. What they have been trying to do is make sure to shift it more on the equity side, try to prepare the companies for IPO issuing. But, of course, since this type of system doesn't exist you require a lot on accumulating the knowledge locally, which company is good,

which company is bad. But I think international institutions were active, like IFC, like EBRD in these countries can also do a lot.

MR. SY: Thank you.

QUESTIONER: The IFC though (inaudible).

MS. KALEMLI-OZCAN: Yeah. The corporate bond. Yeah. QUESTIONER: Corporate bonds. It doesn't go below a certain size.

MS. KALEMLI-OZCAN: Right. But the goal, original goal, is really since this started right after the previous decade of crisis it is about the shift the foreign currency into local currency, and that was the original goal.

MR. SY: We have one question here.

MS. WONG: Anna Wong from U.S. Treasury. Welcome, you mentioned that EMs should not use reserves to smooth effects' volatility. I thought that was a very interesting comment. But my question is, some people would think that it is the buildup of reserves that encourage all these capital inflows into EMs in the past few years, and some people expect that the reserves would be used in times of like 30% depreciation, for example. If it's not to be used to smooth effects' volatility than how should it be used? I would be interested in hearing thoughts from the other commentators on that question.

Question two is, Steven has mentioned several times this question, what are we worrying about in terms of FX borrowing? What are we waiting to happen that hasn't happened yet? My question is, why do we care about financial stability if the ultimate goal of maintaining financial stability is to encourage growth? Growth in many EMs right now are even worse than when they need an IMF program. Let's say, for example, in 2002. Right now the growth is even lower than that. So if there's no financial instability problems stemming from the FX lending, for example, but what if there's a slow burn rise in debt servicing from the impairment of balance sheet and lowering GDP in the

next few years, reducing resources to put into productive investment. Shouldn't we worry about that? Is that the way that we should be worrying about FX borrowing?

MR. CECCHETTI: Can I just ask you? Are you suggesting that the financial stability policy framework is hampering growth?

MS. WONG: No. I'm suggesting --

MR. CECCHETTI: That's kind of what it sounded like.

MS. WONG: I'm asking just an intellectual question, like what are we worrying about in terms of the FX, right? And what if there's no financial instability? We're not expecting to see a systemic --

MS. KALEMLI-OZCAN: I actually mentioned this in my introduction. Let's say, okay, either of these guys are hedge or let's say they are not that big a risk. I image the direct effect on the real sector, right? Because of given the vertical production change and vertical supply chain. I mean, once these guys starting -- forget about default or rollover. This is going to affect all production chains.

If you look at actually now the loan level data you don't have to see a delinquency there, right? You can ask for a rollover, right? That is going to affect the bank and that's going to affect the loan. So, yes, if you believe a health financial sector's primary role is intermediate and credit from favors to producers, of course. I mean, the answer to your question, it's extremely important.

Just to get this firms' balance sheets. So this is actually the Turkish case study in the paper. Like the construction sector, there's a lot of this. Yes, it is part of the credit boon, so it can be a healthy thing, but then if it comes to a point where these guys start rolling it over and harder to pay because of increased debt service issues, obviously, it's going to affect investments, it's going to affect other firms' production investment. It's going to affect the real sector just through that link without any connection to the financial

sector.

MS. WONG: That is something that we should be worrying about?

MS. KALEMLI-OZCAN: Yes. That we should worry about. I meant we could worry about (inaudible) but, I mean, this is -- yeah.

MR. KNIGHT: Your question on reserve use I think is a very good one. I realize I'm a little bit out on a limb here, but I believe that I can stay here safely. I start from the premise that -- there was probably a seminar here at some stage three or four years ago about the commodity super cycle and how it would never end. We were going to have high commodity prices forever.

MR. ELLIOT: We are out of time.

MR. KNIGHT: But only after the fact. As a Canadian, I know that that's not true. But my basic premise is that a lot of commodity producers' exchange rates were overvalued in real terms. They were overvalued because of ultra-accommodated monetary policies. They were overvalued because they were getting huge capital inflows, particularly from carry trades which they tried to sterilize but couldn't. That's why their reserves went up.

There had been a conscious policy by the Asian crisis countries to build up reserves after the Asian financial crisis so that they'd never have to depend on the World Bank or other international financial institutions again. That's the self-insurance motive. But I don't think what's been happening over the past five years is that. So if you exchange rate starts out being overvalued in real terms and you're watching on manufacture ring industry after another quietly go bankrupt without any significant financial system effects. That should be a disturbing thing, and so you should let your exchange rate depreciate so that you are competitive again and can employ your labor force.

Now, you might say, well, but don't you have to smooth it as goes down? Perhaps, but it always raises the question of are you smoothing around the right rate. Secondly, it raises the question, if you come in as the authorities and smooth it, it creates a disincentive for the private sector to come in and smooth it itself. So my argument would be, in this area, laissez faire. Leave well enough alone. Let the rate go down until you're really sure it's over depreciated.

MR. SY: I think that's quite clear. Any more questions? If not maybe I have a last question. So after the Asian crisis there was this initiative, Asian bond fund. A lot of movement to create this domestic bond markets, and self-insure, and not depend again. Then we see that it's very, very difficult to get rid of the influence of the U.S. dollar. Right? So my question is, what can countries really do, domestically, when there's this push to increase domestic remobilization and so on when there is this whole part of the global economy that you don't control. Is it through global governance? Again, trying to get the Fed to --

MR. CECCHETTI: As a point of information, the Asian bond fund and the like were created to push for domestic currency sovereign bonds. That, I think, has been pretty successful --

MR. ELLIOTT: There are now a lot of Asian currency --

MR. SY: But at the same time there was a lot of push to reduce the maturating mismatches and the FX mismatches, take a balance sheet approach of the economy, and so on. So there was a big push just after the crisis, but now we see that because interest rates have been so low, emerging market corporates have been borrowing a lot again.

MR. KNIGHT: I don't think it's just that, though that's clearly a major factor. The local corporate bond markets often stink. There's a lot more that could be

done. It's true, they're trying to make some efforts. There's far more that could be done to make them truly efficient liquid markets.

MR. CECCHETTI: I mean, I would point to some of the things that Malcolm said in the answer to the question about SMEs and say, you've got to do this for all the borrowers in domestic markets, and if you do that that you're going to have much higher quality --

MR. KNIGHT: Markets.

MR. CECCHETTI: I think some countries have worked towards that. Right? Credit registries, property rights registration. All sorts of information disclosure rules. I think it's improving. It's just not there yet.

MR. KNIGHT: It seems to me that, to a certain degree, the market is already doing what we wanted to do many years ago with the Asian bond crisis. Because we have ETFs of emerging economy bonds, both ETFs and bonds that are dominated in domestic currency, and ETFs of emerging economy corporate bonds that are detonated in dollars. I assume in Euros as well.

That, I think, has achieved a certain degree of interest by investors. These funds grew a lot. They're still pretty small. Of course, in recent -- over the past year and a half there's been little interest in them. Not sales out of them. That does seem to me to be a way to go in this area to resolve the problem. However, it is not going to resolve the issue between SMEs and larger corporates that can borrow on their own name and international markets. That's going to take the kind of work that we talked about earlier. We're still going to get that distortion, I think.

MS. KALEMLI-OZCAN: Exactly. Again, at the end we start talking about what this means in emerging markets. We have to face the fact that we cannot talk about these things without talking about the banks. Most of the emerging markets are still

bank-based systems and the small firms in those countries are going to go through the domestic banking system. That's just a fact of life.

In fact, actually, linking this to do reserve accumulation question before and what Malcolm said, I fully agree. I mean, countries shouldn't really interfere, right? I fully agree, but at the end of the day, this fear of floating that emerging market has it's a very deep and structured problem. They end up doing things. Right? I mean, Asian countries went down this road of doing the reserve accumulation. But if you look at the other emerging markets, like they said, okay, we are not going to do that, and we are just going to have some reserves, but not to the extent like China. But then they go and do other things. They actually force their banks to accumulate them which is a form of financial oppression.

They can put this on the table as a macroprudential policy, it is, because you can have the reserve requirements in foreign currency on the banks' part increasing and then decreasing. So it can work like a counter-cyclical policy. But at the end of the day, they always do this. Either managing the exchange rate directly, making banks accumulate the FX reserves, they accumulate the reserves. So, there is a clear difference here between the Asian countries and the others. But overall, the emerging markets they are not at that level like the developed countries, just less float. The equilibrium exchange rate. They just can't do that. I mean, we have to be pragmatic about it.

Hopefully it will come to that day. I also want to see that day will come. But what we know from emerging markets, the whole emerging markets central bank acts on this premise. How are we going to solve this dilemma that we are going to use the interest rate and the inflation targeting for the macro stability, but then we have to somehow watch out what is happening to the exchange rate? There is a direct link.

Right? I mean, one is going to undermine the other which is the standard dilemma of an emerging market central bank.

MR. SY: Let me know use a self-disciplining device which will work. Steph has to take a plane, so he has the last word.

MR. CECCHETTI: You asked, actually, about dollars. I think this is maybe the thing to leave with. It's related to the accumulation of reserves which has a lot to do with attempts to self-insure against dollar funding shortages. I think that's probably an okay use, still, of those reserves.

I'll end with a comment which I think is related to what you said, Amadou, which is that this issue about dollar funding, and the issue about a dollar denominated financial system outside of the United States I think is something that we really have to think much, much more about. Using some information from some of my former BIS colleagues, I was able to compute that the size of the dollar-based financial system outside of the United States, so what I would call a second dollar system is about the same size as the U.S. banking system, which is to say roughly 100% of U.S. GDP. So there is, and somebody is issuing, a whole group of people, is issuing short term liabilities in dollars outside of the United States which equal the size of the U.S. banking system, but don't have the backing of a central bank.

The reason that they're doing this is because we like the fact we have a numerary, and the numerary that happens to exist for historical reasons, probably having to do with the fact that the U.S. didn't leave the gold standard in the first World War, but that's another story, is the dollar. You've got this dollar thing out there. You've got the vast majority of trade is invoiced in dollars. You've got the vast majority of swift transactions that are in dollars. The vast majority of FX transactions are in dollars. Everything's in dollars.

Of course, that means that when the cost of doing dollar business moves the whole array of things that go on outside of the country moves as well. I think this is a serious issue for the global financial system and the global economy. It makes the U.S. much, much too important, if you ask me. It gives it a responsibility that at this point I think it's probably shirking. I don't know what to do about it. So maybe some of you will help us figure that out.

MR. SY: Thank you. Thanks to the audience and thanks to all the panelists.

MR. CECCHETTI: Thanks to Christina. MR. SY: Thank you very much.

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