

THE BROOKINGS INSTITUTION

SHIFTING RISKS IN THE GLOBAL FINANCIAL MARKET:
THE WORLD ECONOMY IS IMPROVING,
BUT IS IT STABLE?

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Panelists:

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P R O C E E D I N G S

MR. DERVIŞ: Welcome everybody. I'm glad the room is full despite the summer weather outside or maybe thanks to it to some degree. We have a very, very wonderful event today and we thank Jose Viñals, the Financial Counselor and Director of the Monetary and Capital Markets Department of the IMF to come and share his perspective and thoughts on the main product which has come out I think two weeks or three weeks ago which is on the topic of monetary challenges and managing the risks.

Jose was before as Deputy Government and had successive positions at the Bank of Spain. Was Chairman of European Central Bank International Relations Committee and Chairman of Spain's Deposit Guarantee Funds. And he is a member of the Bank, Visbank for International Settlements Committee on Global Financial System, European Central Bank Monetary Policy Committee, a high-level group appointed by the European Commission to examine economic challenges facing the European Union.

So we really couldn't have wished for a better speaker on a more interesting topic these days which is so hotly debated everywhere.

And we have two panelists from, associated with Brookings, from Brookings joining him. Doug Elliott, who is a Fellow in Economic Studies, who has written profusely on the global financial sectors of pensions on the Eurozone crisis, particularly on Greece but not only on Greece.

For two decades, he was an investment banker, principally at JP Morgan. He's the founder of The Central and Federal Financial Institutions, a think tank devoted to analysis of federal lending and insurance activities, and he also was a Visiting Scholar at the IMF.

And the we have Eswar Prasad, holds the New Century Chair in International Trade and Economics. I think it's the best sounding chair at Brookings, you

know. New Century Chair in International Trade and Economics. I wish more chairs have such fantastic names.

But anyway, he is also the (inaudible) Senior Professor of Trade Policy at Cornell, and a Research Associate at the National Bureau of Economic Research. When he was at the Fund, number of various positions. He was head of the Financial Studies Division, and the China Division at the IMF.

So what we'll do today, we will have Jose Viñals introduce the topic, share the main points about the report. Then we will have first Doug and then Eswar comment on it. And then I will try to animate a more general discussion maybe with some questions of mine, and then questions from the floor.

Jose, please. Thank you very much again for coming. And I think you can take your seats now.

MR. VIÑALS: Thank you. Thank you very much, Kemal and good afternoon to all of you. I hope that depriving you from the beautiful afternoon will be worth it. But that's something you will have to only see after the session.

As Kemal was saying, a couple of weeks ago we had the spring meetings of the IMF and the World Bank, and we published the Global Financial Stability Report, which is the analysis that we do once every six months.

MR. DERVIS: Can I interrupt? We just realized that we can't look at these lights.

MR. VIÑALS: Oh, okay. Very good. Very good.

Now, I know you certainly can. So as I was saying, in our Global Financial Stability Report, what we do is to take the pulse of the global financial situation. And what I'm going to do in the time of my intervention is to give you the gist of it to give you the key messages so that we can have an interesting conversation later on.

As you can see, the title is *Global Financial Outlook and Risks*. And I want to start by reminding you that this conversation that we are about to have takes place against the background of what we have called from the Fund, "the new mediocre," referring to the very moderate and uneven global economic recovery. And this is not a comfortable place to be for the financial system and this new mediocre is leading to complex challenges to stability.

So what I will do will be to start by giving you the overall assessment of where we are in terms of the global financial situation. And then I'm going to go through the key challenges that in our view are being faced by both advanced economies and emerging markets. And I'm going to talk a lot about monetary policy and the relationship between that and financial stability in the next few minutes.

So let me now tell you a little bit about the overall assessment. And the main thing is that if one looks at the global financial situation, we can see two things. The first is that risks to global financial stability are rising recently.

This a composite indicator of risks to global financial stability. And what you can see is that although fortunately we are far below where we were at the time of Lehman and earlier in the crisis, but nevertheless, in the recent past, we have had an increase again in risks to global financial stability.

And this is not independent from the second feature which is that risks are rising and rotation to parts of the financial system where they are harder to monitor, to assess, but also harder to address because we don't have that good policy tools to address it.

And this rotation of risks takes different ways. Is a rotation from risks in the bank system, which are rotating to us, the non-banking systems, from risks of credit, which are rotating into risks of market liquidity, and (inaudible) rotation that I will talk

about later on which has to do with risk rotating from advanced economies to emerging markets, something very different from what happened earlier in the crisis where risks were concentrated in advanced economies and emergency markets were doing quite well.

So this is the overall scene and I will be more concrete as we advance.

Now, what are the main challenges for global financial stability? And I'm going to start with advanced economies. And a lot of these challenges have to do with monetary policy. And the big thing there is to increase the effectiveness, attraction of the accommodative monetary policies that are in place in Japan and the euro area while also managing the adverse side effects that they may have on financial stability.

And the other monetary policy challenge is to achieve a smooth exit in the case of the United States. So they're entry and exit-related challenges.

Let me start with the entry challenges and start with euro area. And there you know that the big thing is that the European Central Bank has started doing finally quantitative easing and I think that this is great news that at the end they did it.

And they are purchasing now large amounts of silver and bonds. And the question is, is this working? And the answer is it is starting to work. And it's working, certainly, through the (inaudible) price channel. And as you can see there on the left panel, if one looks at the change in (inaudible) prices in the euro area, from the moment that markets started discounting quantitative easing which was following the speech by Mario Draghi at (inaudible), there's been a very significant reduction in (inaudible), a very significant reduction of bundling (inaudible), by the way, both of them in the core and in the periphery, and at the same time there has been a significant depreciation of the euro and a very large increase in equity prices in the euro area.

So all of this is rather broad-based and it's helping to (inaudible) domestic demand (inaudible) and (indiscernible 18:37:) and, therefore, is contributing to improving the perspectives, the economic perspectives of the euro area and also to support inflation expectations which is key in moving back to price stability.

But the (inaudible) price channel being important, there is another channel which is even more important in the euro area and that's the bank lending channel. And that is so because unlike in the United States, it is bank lending which is the most important provider of funds to the economy rather than markets.

And how is that going? Well, if you look at the right panel which compares the evolution of credit to the private sector, bank rate to the private sector, in countries which have had quantitative easing what you can see is that getting credit to reasonable growth rates takes time so one needs to be patient.

In the euro area, things are starting to be better although still very close to zero. So the thing is can something be done in order to accelerate the speed with which credit is being provided in the euro area because that would be a tremendous support to the recover because the demand for credit is starting to recover.

And the answer is, yes, there is something that can be done to unclog bank credit in the euro area and that has to do with dealing with nonperforming loans. Clearly, not the banking system. And you would say, but wait a minute. You're talking about cleaning out the banking system? Didn't the European Central Bank do the (inaudible) review and the stress test? Didn't banks risk capital? Isn't the problem been solved?

And the answer is the capital problem has been solved, but the banks still have a lot of bad assets out of nonperforming loans which have to be dealt with.

And, in fact, there are \$900 billion of nonperforming loans of Euros. Nonperforming loans sitting in the balance sheets of European Central Banks.

And why is it that nonperforming loans are important for credit, for the supply of credit? Well, because empirical evidence suggests that all the things equal when you have higher amounts of nonperforming loans, you are less willing to provide credit even to solvent, potentially solvent debtors.

So higher performing loans, lower lending.

Q And then the question is why is that the euro area has such high rate of nonperforming loans. And there you can see the comparison between the euro area and the United States. And what you can see is that in the euro area compared to the United States, nonperforming loans are higher and rising. And a key difference which explains why this is happening in euro area and didn't happen in the United States is that the write-offs which is the surgery that is performed in order to attract these nonperforming loans out of the balance sheets rose a lot faster and more decisive in the case of the United States than the euro area.

So the key message for European Central Bank now that it is the single supervisor is deal with the nonperforming loans. And also for the governments which have to do changes in the legal frameworks, in the national legal frameworks, in order to improve the frameworks for in and out of court debt restructuring and so. So this a very important thing to enhance the attraction of quantitative easing.

But of course, every medicine which is needed to keep the patient alive also has side-effects. And of the side-effects has to do with the negative impact that low, very low, even below zero interest rates are heading in certain segments of the financial system.

And I will use the example of the European life insurance industry. And this is a simplified representation of a stress test which was carried out by the European Life Insurance Authorities basically asking the question how is the environment of low interest rates going to affect the solvency of life insurance companies? And this is the baseline scenario that they had. And on that scenario, one can see that 14 percent of European Union life insurers would be in something below solvency minimum.

If one way to think of a Japanese scenario in terms of interest rates which is much lower interest rates over the maturity spectrum going forward, 24 percent of the life insurers would be below solvency minimum. And if we were to consider the present situation regarding the (inaudible) and think what would happen if that were to remain with us for a long time, for many years, then we don't have the supervisory information to reproduce these results there, but you can easily infer that the amount of, or the percent of life insurers that will be below the solvency minimum would be far higher than 24 percent.

And that's important. It's important because life insurance companies are very key savings for retirement vehicle in many European countries, for example, in Germany. And also because they hold a large amount of financial assets in the European Union. In fact, they hold more than \$4 trillion. And that means that they, the \$4 trillion Euros that they hold are a very important source of financing for the euro area economy.

In the yellow bars, you can see how important are the holdings as a percent of total outstanding. So it's quite, quite important. And you want to avoid today problems that they don't materialize tomorrow because if they materialize tomorrow, you're going to have not only solvency issues but also cash flow issues which are going

to be very disruptive to bond markets in particular and are going to play a negative role in the financing, in the life insurance system financing of the European economy.

Let me move now to the other monetary policy challenge which has to do with exiting. And that is in the United States. And the challenge for the fed is (inaudible) in what has been repeatedly called uncharted territory.

And I think there are two challenges that the fed needs to manage in order to get the smooth exit. The first one is the divergence in views between what the fed has been signaling through the A4MC and what markets think. And this is just a very stylized representation of the median dots of the A4MC, (inaudible) and what markets think, the blue line in terms of market prices.

So you can see that markets are betting on a much lower exit than the fed although markets this view with significant degree of uncertainty as revealed by the shaded area which is the market (inaudible) distribution of the views of market participants.

And the second challenge by the fed is to achieve a smooth decompression of long-term interest rates. Now long-term interest rates are slightly above 2 percent but still very, very, very low relative to what they should be.

And part of the reason why long-term interest rates are so low is because the term premium is also extremely low. Is well below its historical average. So the question is how will the term premium decompress, and how is that going to affect the transmission mechanism from short-term rates to long-term rates.

So the baseline scenario is on of smooth decompression. That's what the fed wants. That's what we all want. But there are two alternative scenarios which are far from being zero probability events. One is a faster decompression of long-term interest rates because the term, "premium," like a spring will jump and then you will have

something similar to the (inaudible) that we had in May of 2015. So this is a risk. I don't think this is the most likely event, but it's an alternative scenario. And that would have (inaudible) and global repercussions.

And then there is another scenario which is the stalled long-term interest rates which would happen when the fed pushes the policy rate up but the long-term interest rate is not increasing sufficiently because there are capital inflows coming from the rest of the world as a result of the quantitative easing policies in the euro area, Japan, and so on. There is money which keeps coming in and people outside keep buying Treasuries and that means that the prices are high but the long-term interest rates are low.

And then the question is what would be the reaction of the fed and how would that lead them to a faster increase in the policy rate and what would be the consequences for the dollar which very much depends on the policy rate. And that's going to be an important part of the story.

So as you can see, not an easy constellation of scenarios. We don't know yet which one is going to (inaudible).

All of these -- even more important because another challenge that we have to deal with is that in spite of the abundance of global monetary liquidity, as depicted by the blue line, market liquidity in terms of what we would call the depth of markets or bad weather liquidity, which is the capacity of markets to be liquid at bad times, that liquidity has been coming down and down. So indicators of market liquidity, the structural liquidity markets, have been coming down over time even as global monetary liquidity has been going down.

And this is important, and this happens as a result of a number of factors, some of them related to the expansion of the asset management industry, but

there are other reasons too, the liquid markets are key because this liquidity you can find in many fixed income markets. You can find in (inaudible) markets but clearly in the (inaudible). You can find in advanced economies. You can find it in emerging markets, in (indiscernible 28:48:11 bond markets, in corporate bond markets.

And what means is that the liquid markets have the potential for the amplification of the price consequences of shocks that will hit the markets. So this is a very powerful amplifier of whatever shocks hit the markets in the future.

But not only that, illiquid markets tend to come together with higher correlation of (inaudible) prices across markets. So the more illiquid are markets, the more is the potential for (inaudible). So that's a very important issue that was not in the (inaudible) of policymakers a few years ago but which now is at the very center, the potential for illiquid markets.

All of this is not only important for advanced economies but also for emerging markets which may be affected by shocks which are amplified and extended throughout markets. And in fact, emerging markets have to address global shocks but in the presence of some domestic vulnerabilities.

And I would like to point out to some of these domestic vulnerabilities, in particular relating to the (inaudible), the corporates, and the banks. And I'm going to focus on one issue which I think is going to be critical in the next few years which is the strength of the dollar, and exposure of emerging markets to foreign exchange risk.

If one looks at sovereign markets, one can see that there is (inaudible) exposure as a result of the foreign exchange debt which has been issued by these markets, and you can see what the situation is in key emerging markets. But on top of that, there is (inaudible) exposure to foreign exchange risk because even if you issuing domestic currency (inaudible). And so far as foreigners buy these bonds, they will be

subject to the temptation of exiting your market if they think that your currency is going to depreciate.

Do there is this (inaudible) exposure to foreign exchange risks. And if one puts one together with the other, then one has a sort of modified picture where some of the emerging markets in the picture are much more sensitive to foreign exchange risks than what the simple foreign currency debt amounts would tell you.

How about the private sector? Well, the private sector has been deleveraging a lot in emerging markets, particularly the corporate sector since in the last few years. And the buildup of foreign exchange debt positions has been significant and you can see there that this is something which is particularly important in cases like Chile, Poland, Turkey, Russia, or even South Africa.

But important thing is not exposure to foreign but exchange the (inaudible) part of that exposure. And one problem that we have is that we don't have sufficiently good data, systematic data, in order to know to what extent these foreign debt exposures are (indiscernible) or not. So this is something that would lead us to be cautious.

Now, one further issue in emerging markets is how strong is the banking system. And this is important because the banking system continues being the key provider of financing in emerging markets both to households and corporates. And the banking system needs to be strong enough to absorb shocks. And this is a characterization of the strength of the banking system in terms of liquidity (inaudible). And as you can see in most cases the the liquidity are high but not in all cases which means that in the case of Hungary, of Russian, of India, or Chile, and even South Africa, this loss of sovereign buffers are on the relatively low side.

So there is a potential for corporate bank adverse (inaudible) that should be monitored and emerging market authorities should be preemptively acting to avoid any of these feedback (inaudible) getting into play.

One key emerging market that I'm going to highlight is China. And you have heard a lot about China, the slowdown in China and so on. But let me look at something which is very relevant for the financial stability of China which is that in China the property market, as you know, were significantly rich evaluation in the past few years. But the market then has been disinflating and rightly so, but is very critical to avoid a collapse in market prices. Why? Because the financial system is very exposed to the real estate sector. In fact, as you can see, about 25 percent of bank credit, dotted line, 25 percent of bank credit is in the form of exposures to the property sector and about 17 percent of total credit granted by both banks and non banks, is again concentrated on the real estate sector, on the property sector. So this is a very important issue for China. Disinflation but not collapse property prices.

So conclusions in terms of the policies which are needed to safeguard financial stability? Well, policies that enhance (inaudible) of monetary policy and at the same time financial resilience.

To summarize, in advanced economies, maximize effectiveness, (inaudible) of monetary policy. In countries like the euro area and Japan, monetary policy needs to be better accompanied by fiscal policies, by structural reforms, and in the concrete case of the euro area by the cleaning up of the nonperforming loans which still exists in the banking system.

And in the United States, the challenge would be to achieve the smooth exist, something that only time will tell whether can be achieved, but certainly that the fed

doesn't get behind the curve or ahead of the curve of inflation in terms of exiting on the policy rate, and that it can clearly communicate it's movements would be very important.

At the same time, manage the financial excesses and adverse side effects coming from too low interest rates. And again, (inaudible) policies are key. I gave the example of life insurance companies as an example of non banks that would be affected, but there are many other things that you can think of where potential policies would be required.

For example, in the asset management industry.

Emerging markets always strong fundamentals, have policy buffers, foreign exchange buffers, and then have (inaudible) policies in monitoring the health of corporates, the health of banks, and avoiding the perverse feedback loops that may emerge if any of those are really weak.

And at the lower level, something very important. Globally, we need to be very attentive to enhancing market liquidity because illiquid markets is one of the biggest risks and challenges that we have nowadays. And that's something that can only be done in the context of completing and implementing the regulatory reform process.

So let me stop here.

(Applause)

MR. DERVIS: Just one, I mean, I will turn to back in a minute when we're on mike. But one question, Jose, when you mentioned the MPLs, can you just briefly tell us or remind us the relationship to the stress test? In other words, these were MPLs that were taken into account by the stress test and are still on the books of the banks. So the banks kind of passed the, I mean, most of them passed the stress tests with these MPL on their books. They're not large enough to have created the problem.

MR. VIÑALS: Right.

MR. DERVIS: At that point?

MR. VIÑALS: Right. And, in fact, this was one of the things that the assets quality review did was to enhance very much the transparency of European banks. And in that context it turned out that when the ECB did the due diligence on the banking system, they found that about, that the banks had about 18 percent, so nearly 20 percent higher, nonperforming exposures, as they call it, than it was previously revealed.

So that was a finding of the asset quality review. And then the stress tests, as well, looked at how much capital should banks have in order to remain solvent in the context of something going wrong with the (inaudible) and so on.

And a few banks failed the stress test. They were asked to submit very promptly plans for recapitalization, and this issue was solved. But the nonperforming loans were there.

Now, the nonperforming loans doesn't mean that the bank is insolvent, the bank is solvent, but the nonperforming loans are a drag on the banking system because if you have nonperforming loans, you (indiscernible 18:58:17 these nonperforming loans (inaudible) but over time if they don't pay, unless you had provisioned them fully which you don't, this will eat up your capital. So that's a problem

But in \$900 billion in nonperforming loans means that \$900 billion of bank assets are not making money. So that's a drag on the profitability of banks. It's a drag on the capacity of banks to generate profits that go to future capital that allows them to continue lending. So all in all, this a tremendous barrier to lending.

So this is why you need to deal with the nonperforming loans in order to remove a disincentive that banks have when they say should I lend to these marginal (inaudible) or not. And if they say, well, I already had a lot of problems inside of my bank. I better not. And the empirical evidence is that other things equal banks which have the

same level of capitalization, capital ratios, and which are facing the same (inaudible) conditions because are in the same economy, the banks that have lower nonperforming loans lend more than the banks which have the high nonperforming loans.

MR. DERVIS: Okay. I just wanted to clarify that. So let's start with, Doug, with your perspectives.

MR. ELLIOTT: Okay.

MR. DERVIS: On this maybe five minutes, six minutes, something like that.

MR. ELLIOTT: Sure. Well, there's good news and bad news in following Jose. The bad news is obvious. He has a very high level of substance and presentation. So I prefer to follow somebody whose worse.

On the other hand, he's raised quite a lot of very good points. And if you have a chance to read the GFSSR, it's chockablock with interesting and good analysis.

So choosing among these things, simplifying a little bit, it's not a surprise that very loose monetary policies including quantitative easing would mean there were more financial stability risks. Basically, with very loose monetary policy, you're trying to push people into taking financial risk. So no surprise that we're seeing an increase in that.

That doesn't mean it's the wrong thing to do because the benefits to the larger economy of having more of that risk taking, getting the economy going again I think have outweighed the disadvantages.

But looked at just from a financial stability point of view, what Jose is pointing to certainly is no surprise. So the question as he's pointed out himself is effectively how you balance these two things. How do you figure out how to deal with

those increased financial stability risks while still getting as many benefits as possible from the underlying economic impulse that has come from this risk taking?

And I was very glad to see the highlighting of the European life insurers. So I think they're great example of the problem, two problems. Search for yield meaning a willingness to take excessive risk because you're desperate to earn something on your money combined with the fact there are too many rigidities in government regulation in too many places.

In Europe, there are actual requirements in many cases from the regulators to provide a minimum rate of return on life insurers which is well above what you can actually earn on safe bonds at this point. And I don't think that's any way to run a railroad, as they say? So it's very good to see some quantification there, some highlighting of what (indiscernible 19L:02:03) came up with and some addition to that.

I want to follow up on the MRLs, as well, since Kemal was picking up on it. And here I agree with the thrust of the GFSR and of Jose. I do think it would be better for Europe to work through these MPLs. But I would have liked to have seen more discussion of what that actually means. Because if you think about dealing with MRLs, there are three aspects of it. One is just start by recognizing the reality. You're always going to manage your financial institution better if you can see what the truth is so you don't fool yourself. Nobody is going to argue with that part of it.

The second thing is in many cases your bank isn't probably very good at dealing with a nonperforming loan and there are specialists out there, who are much better at it. You can also get economies of scale. So you may not be the best holder of that asset once it's gotten to this point.

Though again, that's a good reason to move it out.

But I think if you look at the analyses, the biggest effect of dealing with MPLs is that you have to come up with additional capital to fill the hole. So if you think of MPLs as a representation of a negative amount of capital that hasn't been fully recognized, and you combine that with the capital you do have, what we're saying in many ways is you should raise your capital levels. And it's well known that if you have higher capital levels, you're more likely to make loans.

So if you get into the more complicated analysis, I still think the policy recommendation is right. But I think it would have been better to talk through what do we mean by dealing with the MPLs? What are the processes and how would that play out?

Because for example, we don't necessarily want to go to the European banks and say the only people who will buy this stuff will give you 50 Euro cents on the Euro but do it anyway. If the true economic value is 80 Euro cents, maybe we actually want the banks to hold it for some time. So I just want to say it's a little more complicated issue than it might appear on the surface.

And then since I know I've got limited time, let me wrap up. I again think it's a great service to focus on the market liquidity risks. This is something I worry about significantly. And there are multiple factors that are making the markets less liquid. But one of them is undesired side effects of a number of regulations that are being placed on the largest, the largest dealers who hold inventories of corporate and other bonds. And these are the big banks and affiliates of those banks.

There are a number of regulations put in place to make the bank safer that have the effect as well of pushing them to hold much lower inventories. But if you have much lower inventories, and you charge more to your customers for your willingness to hold any inventories at all, then you make the markets less efficient and more volatile.

Now, that may be an appropriate tradeoff. But to take the Devils Advocate argument, and I don't, I don't think that the reality is quite this bad, but you could theoretically have a situation in which to make the bank safer. You put requirements on how they operate but make the market so much more volatile that the interconnections between those markets and the banks mean that in a crisis circumstance, you actually make things worse for the banks than if you had not done the set of rules at all.

This is just another way of saying there are a lot of complex interactions here. And one reason I worry about market liquidity is because at least most of the regulatory actions that are having an effect here didn't really consider the effects on market liquidity. They were all in the silo of looking at a bank as a stand alone entity. How do you make sure it's safe enough and owning securities is a risk. Let's make sure that that's handled appropriately.

So I am glad you're pointing it out and I know you weren't making a particular recommendation as to how to handle that and I know you're not recommending rolling back all the regulations. But as part of calibrating all this, it's important to think about the effects.

MR. DERVIS: Thank you, Doug. And I turn to Eswar now.

MR. PRASAUD: Thank you, Kemal. Under Jose's leadership, the GFSR has become a real pleasure to me because not only does it often venture into uncharted territory, but it also sheds new light on territory that has been chartered but in very different ways and it uncovers very different perspectives that I think are useful to the discussion.

So this year's report I think highlights a set of risks that we need to be very cognizant about. The key issue, of course, is trying to think about institutions that

were in principal doing the right thing. After the financial crisis, the notion of banks being the real problem and fixing the banks as being the key issue I think had gotten a great deal of traction.

So what this year's GFSR points out, of course, is that a lot of shifts or risks are totaling perhaps out of the banking system which in many ways has been made safer to other parts of the financial system. But I found particularly intriguing in the report was how institutions that we think about as contributing to stability, or defuse these risks in a much better fashion, are in fact, potentially going to be sources of risk themselves.

One that Jose mentioned but it's dealt with in great detail in the report is about mutual funds and this ties into the issue of liquidity that Dough talked about. How is it that even mutual funds where in principal there is a very clear sense of what sort of risk is involved, and the risk is very nicely dispersed through the system can, in fact, create much larger risks because of potential liquidity problems.

So if you have people trying to redeem their shares in mutual funds at the same time across a broad range of mutual funds and there isn't enough market liquidity, you could have mutual funds trying to redeem their holdings and this creates problems.

Now, it's hard to think about that in the classical run sort of context because unlike in the case of a bank run where the first few people who show up at the bank door are the ones who get paid off. In the mutual fund everybody's holding NAVs fall by roughly the same amount so there isn't the classical concept of a run. But once one ties it in with liquidity then it does become an issue.

Likewise, Jose spoke about how insurance companies and longer-term investors that one thinks about as providing stability to the market, both in a national context as well as an international context, the notion being that these are long-term

investors who are not there for short-term gain and, therefore, are not going to pull out at the first sign of trouble. They're coming under trouble for a different set of reasons associated with monetary policy and very low interest rates.

So that's another source of risk that one is not traditionally used to thinking about. And then there the risk associated with the emerging markets, of course, which are subjected to a variety of risks association with the debt levels.

Now, after (inaudible), I think there are some interesting questions or points that are worth thinking about. We talk a great deal about financial stability and it always intrigues me, but when we have discussions of this sort, and I think you all participated in many of these discussions, what exactly is financial stability is something that is very, very hard to get our finger on.

So Jose put up a chart that was very nice that provided a measure of risk and showed that that risk measure has actually gone up. So what would financial stability look like? Would it mean that that risk measure drops to zero? Perhaps. That would make for a very (inaudible) financial system. But then the question becomes whether that financial system is doing what a financial system is meant to do which is intermediate savings into investment which inherently has a certain amount of risk associated with it.

So I think we need to be thinking more broadly about this tradeoff and Jose did refer to it and Doug did allude to it as well about what the right tradeoff is. How much risk are they willing to accept in individual institutions and of a systemic level in order for the financial system to work well?

And there is definitely a risk of overcompensating relating to some of these problems like the liquidity problem.

Now, of course, having said that, one could play Devil's Advocate to Doug's Devils's Advocate and say perhaps if you had better regulation of banks, better regulation of financial systems, we would not have in the first place financial shocks that will then cause the liquidity problems to start becoming a big deal because we would have liquidity problems if we go back to thinking about the way things were back in 2008, 2009. We had financial shocks and we say what happened. What would happen if there was no liquidity.

The liquidity issue would become a major concern if you did have a system that was vulnerable to financial shocks.

And perhaps finance is intrinsically dangerous and one has to take that into account.

But I think these are the very fine sorts of tradeoffs that we're going to have to think very hard about. And frankly, being an academic myself, I can tell you that an analytical models are really not up to the task of dealing with this tradeoff yet. So it's very nice to have the IMF take the lead at least on putting a framework on some of these issues.

And the Jose talked about the microeconomic risks.

Now, I work a good deal in emerging markets and I can sense again that the financial market risks are in a sense having an effect on the microeconomic behavior which in turn, I think would have broad repercussions.

One example is about the local, foreign currency denominated debt, especially corporate debt that has been flagged as a significant market economies. But of the things that got many emerging market economies through the crisis and which we see as the success of orthodox polices, you said many of these economies now have flexible exchange rates which acts as a very effective shock absorption mechanism.

But if foreign currency denominated debt becomes a bigger issue in these economies than it already is, it's a big issue. That starts constraining monetary policy because at some level the central bank starts recognizing that if it does stick to its policy of a flexible exchange rate, it can have broader financial consequences.

So now we have financial problems essentially starting to constrain money policy and broader microeconomic policies as well. And in that sense, although the GFSR doesn't take this additional step, I think this is something they're going to have to start worrying about. Not only of the financial consequences, but consequences for macroeconomies themselves.

Jose also spoke about one other risk which is about U.S. monetary policy and how that could have an effect. And here one starts seeing a very differentiated picture in the world economy. If U.S. interest rates were to rise, yes, a certain part of the world would be very concerned. But there would be a certain part of the world, Japan and Europe in particular, that I think would be very happy to see a stronger dollar, higher interest rates in the U.S. because it would serve them well.

So in a sense now we have this divergence between the advanced economies and emerging market economies becoming stronger but for a very different set of reasons. That the way they perceive monetary policy in the U.S. becomes very fragmented because of their initial conditions.

And the final comment that I have is that this is going to have implications for the international monetary system. Because if you think about a poor little emerging market out there having this very difficult balancing act worrying about U.S. monetary policy on the one hand, and the attempts, laudable attempts as Jose argued, of the Bank of Japan and the European Central Bank losing monetary policy.

You have emerging market economies essentially being caught by this whiplash effect of capital flows is the big players in financial markets start moving in opposite directions. And I think what we're going to see really is a return to the sort of reserve accumulation patterns we had back before the financial crisis and even seem thereafter where we're going to have a fragmentation of the global monetary system where emerging market economies feel that they have little choice again but to protect themselves. And as we've seen, the orthodox answer is better policies, more flexible exchange rates, and deeper financial markets are not necessarily going to rescue them.

So I suspect we're in a period of sort of artificial calm where things seem much calmer on the surface but there are these very significant risks and tensions that are building up both in financial systems and the international monetary systems.

MR. DERVIS: Thank you very much Eswar. Let me add a few more points. One point. You know, there were lots of headlines, not yours, you were measuring financial risk. But the Financial Times some I think three weeks ago had this big thing about debt has increased, the overall (inaudible) debt. The public sector plus nonfinancial private sector debt. Okay. And they kind of made a big deal out of it. And the numbers were quite significant.

But on the other hand when you think of the very low interest rates, I mean, isn't that what you would expect? And if you measured debt in present value terms, could one still say that it has increased? At the end of the day, I mean, like Daniel Gross in his recent Project Syndicate piece, if interest rates are zero and maturities are very long, who cares? Is there really debt? So if you look at the world situation debt wise, I mean, what, you know, on that point what's your reaction?

And the other point is one that the Fund raised a year ago, roughly. And, you know, given the problems we're having with trying with trying to navigate this exit

from zero, from trying to manage the zero (inaudible), the microeconomics you talked about, but also the relative price issues which are not that much mentioned in the micro debate but the world is, you know, undergoing tremendous technological change. Skill mixes are going to have to be different.

I would say relative salaries and wages will have to have to change. There will have to be a reorganization of the whole salary structure in a way to respond to the new technological revolution.

So what, what, you know, what is the optimal inflation target under these? I mean, I personally would think that given what we've learned about the dangers and difficulties if managing zero (inaudible), and given the great structural changes that the world has to undergo, and therefore, the need for relative price changes, and the fact that relative price changes are easier if you don't have to actually decrease wages of anybody.

Wouldn't, for example, a 3 percent (inaudible) inflation target be a much better macroeconomic target than a 2 percent? Now, I realize I'm asking this central banker who is viscerally in favor of, maybe, central bankers in general, but I wonder whether you have some words to say on that?

MR. VIÑALS: Okay, excellent points all of them and I actually agree with most of what I heard on the part of the CFU. But let me just make a couple of comments trying to bring things together.

And what I want is to make a pitch for the role that provincial policies can play both micro and particularly macro provincial policies can play in avoiding some of the problems that I talked about and that you have referred to. Problems like lack of market liquidity. Problems like the adverse consequences of low interest rates ending up in problems in life insurance companies or in mutual funds, or even that a number of

countries faced with this global crosscurrents of capital influence and reflows, may decide to use unorthodox means of capital controls basically to protect themselves better from the vagaries of the national capital flows.

And I think that in all of these domains, provincial policies can be rather helpful. For example, there is a debate now going on in Europe in particular about the negative consequences of low interest rates or even negative interest rates.

And it is true. If you look at European bond markets, about a third choose a value of the sovereign bonds at a negative territory. And that creates challenges in countries which are, let's say, like Germany. That's a big penalty for many people who have put their money into, you know, depositors in Switzerland as we know, depositors in Switzerland, Denmark, Sweden, Germany, many other countries are finding that their savers are being penalized and this is something which (inaudible), negative reactions.

But I think that provincial policies can play a very important role in trying to control some of the negative side effects. For example, Doug was referring to life insurance companies. Half of the policies that have been written by European life insurers are far higher than what they can ever get in terms of long-term bond (inaudible). So they should come to grips with reality. Provincial policies can play a very important role there.

The issue of market liquidity risk, it may be that regulations may have to be recalibrated to see what is the impact of market liquidity that (inaudible), but one thing is very, which is very important is that we need better regulation, better oversight of systemic market liquidity. Better oversight of the liquidity management within the asset management industry. That's something that could help as well.

And finally, in terms of emerging markets, if they had better prudential policies or if they (inaudible) better market potential policies, the fear of floating may diminish and before they can be less contrary to using the change rate as a potential (indiscernible).

We know that when your financial system is weak, you fear about higher interest rates or you fear about depreciation of exchange rate because that may create a problem you have net for unhedged (inaudible) liability.

So I think that prudential policies can play a very important role in mitigating the negative side effects of the very necessary accommodative policies that the world needs, very important role in enhancing market liquidity, and very important role in avoiding that emerging markets get sort of lead to a, be taken away that leads to a fragmentation of the international monetary system. So I think that this is something that could be helpful.

On the issue of debt, is there more or less debt in the world? We have looked at this precisely in Chapter 1 of *The Global Financial Stability Report,* and what we find is that if we concentrate, if we look at private sector debt, the answer is, yes, there is more debt in the world.

If one looks at private sector debt, then the answer is different. In fact, debt has come down. And if you look at not only gross debt but net debt, meaning asset liabilities minus assets, this is something that also has come down.

But in some places it has come down in a more painful way than others. For example, in the United States, macroeconomic the leveraging, basically reducing your debts as a result of higher growth, higher nominal growth, is something that has helped a lot more than in Europe or in Japan. So that's a bonus.

Also, in the United States because quantitative easing policies were used earlier in the recovery, picked up earlier, asset prices increased more so the value of your assets increased faster relative to your debts, and, therefore, your net debts were coming down. That didn't happen in the United States and Japan, in the euro area and Japan until very, very recently.

So I think that there is more public debt. There is net, there is less and gross private debt, but the leveraging still has a way to go. And I think that in that context, putting in place in certain parts of the world, and I will come back to the euro area, putting in place frameworks for private sector debt renegotiation is very important.

One of the big problems that Europe has is that the corporate sector has a big debt overhead, and there is a need to recognize reality and enter into debt renegotiations with corporates which are viable, but nevertheless, are overburdened by private sector debt. And this is something which is being done little by little in Europe, but I think that this is going to gather strength in the future.

And your last question of the optimum inflation target and the zero (inaudible 19::24:410. Conceptually, I agree with the point you're making which is sort of (inaudible), greasing the wheels (inaudible). You need some inflation if you have downward nominal pricing (inaudible), you need some inflation in order to have the relative price changes that you need, and if you have more technological change, then that pushes you in that direction. So I would say that (inaudible) for heading inflation rates which are not too close to zero.

On the other hand, I think that if we fear about the (inaudible), the experience shows that the (inaudible) is mainly hit when you run into a financial crisis. And from that viewpoint, if you can make the financial system a lot safer, that can reduce a lot of probability of running into the (inaudible).

So at the end of the day, I think that there is some intellectual debate are there of whether the (inaudible) is best solved with a little bit high inflation targets or with much safer financial system. And you're adding another reasons which has to do with the technological impact on relative prices.

I don't know what I come out, but my preference would be whatever we do with inflation target is to make sure that we also do lots of things to improve the safety of the financial system because with 2 or 3 percent, if we get another crisis like this, we will hit the zero (inaudible) again. And unconventional monetary policies, they're useful, but they're not a perfect substitute for conventional monetary policies and I think that we need also the conventional (inaudible) we get into another crisis.

MR. PRASAUD: You spoke in very positive terms about the quantitative easing undertaken by the ECB and BOG, and you also pointed out as you do in the report that monetary policy by itself cannot do all the heavy lifting. You need the other polices to kick in. But the political reality is that not much is happening on the other policies. You have financial system risks potentially building up as your report suggests because of the unconventional monetary policies.

So let's say a year from now or by the end of this year we find that the deflationary pressures have not eased in Europe and Japan. You have growth still essentially nonexistent. Would you at that stage advocate even more monetary policy easing, again, without having recourse to the (inaudible) which is that you need other policies to help?

MR. VIÑALS: Sure, sure, sure, sure.

MR. PRASAUD: At that point, is the risk return tradeoff still positive?

MR. VIÑALS: One would have to see, you know, exactly what's happening. And here the problem's always with the counterfactual. What would have

been the situation if the quantitative easing had not played a role? Would you have gone back to a significant recession and so? Because let's not forget that the biggest problem, a big problem for financial stability is if you don't put in place these policies and the economy goes into a slam, then that's a killer for financial stability.

So in terms of cost and benefits of unconventional monetary policies, I think that there are decreasing returns. I think that overtime the benefits are likely to be lower, but the question is whether they outweigh the costs. And I think that if you look at Europe at present, to me the benefits still outweigh the costs and I would like to see things going forward and then do the calculation over time. So I don't have a dogmatic position there.

But my impressions that without the quantitative easing policies of the ECB, and given what they were they started thinking about it, we would have been now in a much worse situation. And I also think that the policies of the Federal Reserve have been very important in getting this economy out of the problems they had. In fact, I think that the problem that the ECB had was that they deflated the balance sheet at a time when they should have continued inflating it, and now they are going back inflating it again.

So I think that in a way, the ECB got out of some of the quantitative easing policies that they were doing in a premature manner and now they're going back. And I personally think that this is good news. But if we update this conversation in a year, maybe we will have that interesting discussion again.

MR. DERVIS: Doug, you want to --

MR. ELLIOTT: No.

MR. DERVIS: No? So we'll open it to the floor then. So please, those who want to ask a question, do identify yourself. Start with Uri, then you, and is there anybody on this side? Okay. We'll take three questions at a time.

MR. DADUSH: Yeah, Uri Dadush with the Carnegie Endowment. Thanks, Jose. Wonderful presentation. I have to say that I felt like the first time you go to see a doctor and he gives you the list of diseases and you have to take off what you have and don't have, and by the end of it, you feel very, very nervous.

What I really want to know is from this list of diseases, what's number one that really worries you over the next 12 months? And by the way, I notice you didn't even mention Greece as a possible disease.

MR. VIÑALS: What did you say? What was that? What was that?

MR. DERVIS: Greece. Greece.

MR. VIÑALS: I know. Okay, Greece is a beautiful country (inaudible).

Let me tell you that. But let me answer --

MR. DERVIS: Let's take first three questions.

MR. VIÑALS: Okay, you're going to take questions?

MR. DERVIS: Yes. Right here.

SPEAKER: Wesley X, IDB and World Bank. I wondered if you could talk a little bit about the impact, if any, that this long period of low interest rates has had on property and stock market valuations. Are we starting to get some froth anywhere there?

MR. DERVIS: Thank you. And the third question?

MR. VALDERAMA: Rodrigo Valderama, Plantation International. With regard to the market liquidity that you mentioned, and yet you have bank liquidity in Europe, what is, what's the scenario now for the developing countries with this, with

market liquidity crunch? And with the higher interest rates in Germany, is that going to be sort of like the tail that moves interest rates elsewhere a little higher?

MR. VIÑALS: On your first, on the first question, what is the number one worry that I would have? The challenges that I have presented there, the thing that I worry the most as a structural issue is the low market liquidity.

In the crisis, we had a lot of leverage, and when things went sour, then there was a precipitous attempt to deleverage and there was lots of fire (inaudible) sales and markets writeup. Now we don't have that much leverage in the financial system, at least in the banking system.

But what we have is a potential for leverage like behavior in the sense that the volume of facts which are potentially prone to running towards the exit door is so huge now compared to the exit door that markets are likely to be able to be overwhelmed.

So this is the problem with market liquidity. The potential for having more funds, trying to run over there and the exit door which may have become narrower maybe as a result of some of the regulations that Dough was talking about.

So that is going to be a very important issue to solve and we need to move fast. This is something that we have been worrying at the Fund for more than a year. I have been putting this at the center of the discussions that we have with the officials during our springs and our meetings for the last year and a half. Now, it is something which has been embraced by the Financial Stability Board which wrote a program for a year now I think is getting the credit that it deserves, but to me it's a very important issue.

And it's very, it is not easy to solve because it requires a lot of analysis, and also a lot of experimentation with policy tools which are relatively new. So I think that's to me a very central thing.

And you're right. I didn't mention the word of Greece. I could have added another challenge which has to do with other risks like (inaudible) risks, Russia, Ukraine, or risks coming from the situation in the middle east, or risks inherent in the Greek situation.

As you can imagine, we are devoting quite a bit of time inside of my institution to working together with our European colleagues and the Greek government to find a solution to a difficult case. And our ultimate objective and our common objective, (inaudible) of European Central Bank, the European Commission, is to put Greece back on the path of growth and stability.

But this is taking some time and time is not abandoned here. Even the (inaudible) of payments that Greece has made. But it is an issue. But our central scenario, or central scenario, our baseline scenario, is still that we will work hard, as hard as it takes, in order to get a good agreement. Not any agreement. A good agreement that can put Greece back on the path of growth and stability. But it's not easy and there's still quite a bit of progress that needs to be made. But again, this is something which is important. I didn't talk about, but it is relevant.

Valuations, equity valuations and how the low interest rates are affecting equity valuations, well, if you look at equity valuations in Europe according to fair value models, you cannot say that equity prices in Europe are overvalued.

And if you look at the United States equity valuations depending on some indexes are okay. Depending on others are a little bit too richly valued, that's a

close call. This morning we had a good conversation at the Fund between Christine Legarde and Chairwoman Yellen and this issue came up.

Her assessment was that United States' equity prices are not, are not overvalued. In our assessment, we don't see them out of line. But again, if the situation were to continue and they were to continue going up and earnings expectations were not matching their path, then we would start worrying about it. So far, I don't think that one should panic about it, but going forward, one should be careful.

And the last question that you asked, I wasn't sure whether I understood the question so forgive me if I give you the answer which I think is right but may not be what you're asking. You were talking about market liquidity again. You mentioned something about German interest rates rising?

MR. DERVIS: Just a second so that other people can hear also.

SPEAKER: Sorry. Almost two questions in the sense that you've got a squeezer market liquidity and how that can affect developing countries with lower exports, et cetera, and how the interest rates in Germany that are starting to trend higher can affect also interest rates elsewhere which would also affect, obviously, the developed and the developing countries.

MR. VIÑALS: Okay, thank you.

MR. DERVIS: Can I just add, you know there is, in many developing countries, there is this press coverage and this chatter that, you know, a 50 bases points increase in fed policy rates or a 75 bases points increase in fed policy rates is going to spell disaster, you know. And so, I mean, isn't that vastly exaggerated? In other words, haven't markets already looked forward to this, have priced it in. And moreover, given the U.S. situation, given the somewhat doubtful strength of the recent numbers and so

on, I mean, isn't the best assumption that whatever the fed will do it will be extremely cautious and gradual?

Given all that, is there an overblown fear of decompression in the emerging markets that maybe masks their own structural weaknesses much more than what the fed will do?

MR. VIÑALS: I think that the fed has always been emphasizing that they were going to try to be very caution and very gradual and that any move they make would be data dependent, that would say dependent. So on that part, I think that's fine.

It's true that the term premium is extremely compressed and that it's more than 100 or 120 bases points below what would be a historical average. So we are talking about, without talking about the movements in the policy rates a potential for the compression of the term premium which could be quite large.

The thing is whether (inaudible) compression is going to help (inaudible) smooth manner or in a rapid manner. And if it happens in a very rapid manner, there could be some volatility and some repercussions. But one lesson that we learned in the taper tantrum episode is that even if at the beginning, the first couple of weeks, everybody was affected similarly regardless of the fundamentals. Then over time, countries which had better fundamentals were able to do much better.

And countries which reacted and started putting in place the policies that improve the credibility of the policy (inaudible) fundamentals also elicited a much better response on the part of markets (inaudible).

For example, Turkey. Turkey was hit again in January of 2014. And then there were actions by Central Bank which was behind the curve in terms of raising interest rates. That helped a lot.

India and Indonesia, which were among the so-called Fragile Five by some market analyst in the first round of the temper tantrum did their homework and then later on they were not much affected.

So I think that the temper tantrum revealed the value of having good fundamentals. So I think that countries which have good fundamentals should be a lot more, in a lot more comfortable position although it is true that there could be a rapid decompression of the term premium which may add to the changes in policy rates. So you can have both things happening. So I would be cautious on that in any case. But I agree, the fear should not overblown.

And on the question of the impact on developing economies, yes, one problem in a number of developing economies, emerging markets rather, is that there is now a lot of the -- think of Mexico. There is a lot of the debt which is now in their hands for foreign investors and the question is how strong does the domestic base engages investors one-to-one, and to what extent is there a domestic counterpart to take that slack. And that's an issue.

So the probability that you may have very significant (inaudible) in emerging market and some drop in liquidity in domestic bond markets may be high if there is some high (inaudible).

Which brings me to the issue that emerging markets need to have ready the means of providing liquidity both in local currency and in foreign currency. And I would do some advertisement. The flexible credit line of the IMF have countries like Mexico, like Columbia, like Poland had I think is a very good insurance policy against these (inaudible) liquidity and I wish that more countries will be willing to come and take that up.

And on Germany, interest rates going up in Germany, one very interesting things. Since the Jackson Hole speech of Mario Draghi in August, what we have seen is some reverse causality in the pattern of long-term interest rates internationally. Traditionally, long-term interest rates in the United States affected long-term interest rates in Europe. Since August what we've seen is that interest rates in Europe, long-term interest rates in Europe coming down have been affected long-term interest rates in the United States which have also come further down because of the capital inflows that have been coming.

Interestingly too, a couple of few weeks ago since the 20th of April, the boomed, the long-term interest rate in Germany has been going up quite significantly. You know what? The long-term interest rate in the United States has moved (inaudible).

So there is this reverse causality. The question is whether this is going to be just a temporary aberration or if this is going to be there to stay. Because if that's the case, and the fed exits and the Europe, you know, the euro area continues with the quantitative easing policies and this leads to a policy rate differential which is increasingly favoring the United States, money is going to keep coming to the United States and people, foreigners are going to keep buying Treasuries.

So there what you would have is rather than the decompression of the term premium that the term premium remains low. And then the fed will have to do something if they feel that the tightening of monetary conditions and financial conditions is not what they want to achieve by the increasing policy rate. And that may be crucial for the implications that this may have for foreign exchange markets.

So for all of those who are short of dollars and unhedged positions, that may be something to focus on.

MR. DERVIS: All right. I think we have come to 2:45 so we're closing. Any last minute from the, from our two discussions? Doug?

MR. ELLIOTT: Yes. If I could just follow up. I think Jose is right to be focusing on the rifts that exist from the decompression of the interest rate spreads that have existed. I very much agree with that. One reason that I agree with him is because the reaction of markets is intrinsically unknowable in this situation.

It's intrinsically unknowable for multiple reasons.

One is some number of investors have taken on more risk than they should have. But that's a fairly subjective measurement. We'd have to know what each investor's base level of position should be and the judge how that, compare that to their actual positions.

We don't have great information on the actual positions of different types of investors, and we don't know what their base level should be, and therefore we don't know the pressures they'll feel when they see the need to adjust.

Secondly, much of what happens in the markets in the short run is people making judgments about what everybody else's situation is, and what everybody else is, therefore, likely to be. And that's going to be very much dependent on what's happening right at the time.

And that's why in the short run, you can get very strong reactions to things that you wouldn't think at a given point in time should have been making that much difference and other times something you could think would make a big difference doesn't make that much difference.

I think we just have to recognize there's a pretty wide range of potential results when you're talking about market reactions.

MR. DERVIS: All right. We do have to thank you very much. Any last -- you agree basically what --

MR. VIÑALS: Yes, I do. I do.

MR. DERVIS: And with very much what you said also?

MR. VIÑALS: Yes.

MR. DERVIS: Well, thank you. You gave us a really wonderful focused and yet extremely comprehensive view of the state of financial world and monetary policy, I guess, and I think showing again that the IMF is one of the pillars of multilateral debate and research and policy advice that we have which should be appreciated, in my view, because we don't have many institutions with that degree of kind of seriousness and, you know, that degree of skill. And, of course, (inaudible) of the leaders of that institution.

So thanks for sharing your time with us.

MR. VIÑALS: Oh, sure.

MR. DERVIS: And good luck to you and all of your colleague to manage these risks.

MR. VIÑALS: Thank you,

(Applause)

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