

General Discussion

Chair: Janet L. Yellen

Mr. Frenkel: My first comment, relates to unconventional monetary policies and to the very concept of “unconventional.” We are getting close to the fifth anniversary of the collapse of Lehman Brothers, which triggered an unconventional crisis, which in turn was addressed by unconventional policies. It is fair to say that five years ago nobody would have believed that in five years the characteristics of policies would still be so unconventional. In the past five years, the size of the balance sheet of the Federal Reserve has expanded by more than four times and the size of the balance sheet of the ECB has also doubled. By now, the assets of the Fed and the ECB exceed \$3 trillion each, which corresponds to about a quarter of GDP. The unconventional policies also reflect themselves in the composition of the assets of the central banks. Accordingly, the Fed’s balance sheet has changed dramatically: mortgage-backed securities constitute a significant proportion of its assets whereas before the crisis almost all the assets were Treasuries. Likewise, the composition of the assets of the ECB has also changed dramatically: whereas today most of the assets reflect long-term refi operations, before the crisis most of the assets reflected very short-term refi operations. The basic rationale of departing from convention and adapting unconventional methods reflected the belief that this departure would be temporary

and that normalization would be restored before too long. In this context, normalization meant restoration of higher nominal interest rates, positive real rates of interest, smaller balance sheets of central banks and a composition of assets that resembles the composition that has prevailed in the pre-crisis era. Now that the departure from normal has lasted for so long and definitely for a longer period than anyone expected, the question is whether we have now entered into a new long-term paradigm in which the “unconventional” becomes the new “conventional” or whether the current structure should still be viewed as a detour since the old convention will be restored. This issue has relevance for the current situation regarding the tapering debate. Why is it the case that by the very mention of the possibility that the Fed might start tapering markets got so unsettled? Is it because markets do not believe that the current state of the economy warrants the beginning of tapering? Or is it because markets believe that we are in a new paradigm and that the financial markets got used to (or got addicted to) the Fed’s ongoing purchase of assets and injection of liquidity? A clarification of this issue may be very important to the effectiveness of Fed guidance.

A related question concerns the response of the rest of the world to the Fed’s policy. When the Fed initiated its unconventional expansionary measures, some policymakers abroad, especially in Latin America, expressed significant concern about the consequences of the appreciation of their own currencies as a result of the Fed’s expansionary measures; there was even a talk of “currency wars.” Now that the Fed considers tapering, the very same foreign policymakers have expressed concern about the negative consequences of the resultant depreciation of their own currencies. It seems that whatever the Fed does will trigger some objections abroad. Should the Fed take into account the foreign consequences of its policies? It seems that as a practical matter, it is unlikely that the Fed could or should include such external consequences into its routine policymaking apparatus. The best contribution that the Fed can make to the stability and well-being of foreign countries is by ensuring price stability and contributing to sustainable growth of the U.S. economy. Thus, if the recovery in the U.S. warrants tapering off the unconventional

policies, such tapering should not be delayed even if it is not greeted positively by some foreign countries.

My final comment relates to deleverage. It is well recognized that one of the reasons for the crisis was excess leverage of all sectors in the economy—the financial sector, the corporate sector, the household sector and the government. It follows that the process of adjustment must be characterized by deleveraging some of these excesses. To date, the deleveraging process has shown significant progress in the United States where the financial sector and the household sector have reduced significantly the degree of their leverage. At the same time, however, the European countries have not made such parallel progress. Since capital markets are globalized, this gap between the degrees of deleverage on both sides of the Atlantic implies that Europe has still a long way to go and in the meanwhile the vulnerability of the globalized system has still not been eliminated.

Mr. Barnes: I'll address this to Charlie Bean. There's been no discussion of the potential impact of unconventional monetary policies on the independence of central banks. Fiscal constraints in the developed world have meant that monetary policy has been the only game in town and I guess this gives politicians a greater interest in monetary policy. Meanwhile, UMP have had powerful distributional effects with clear winners and losers in ways more normally associated with fiscal policy. Presumably, that also means there will be winners and losers during the exit strategy. So I am interested in his comments on whether he thinks UMP have compromised the independence of central banks.

Mr. Portes: Two remarks arising out of the panel presentations, both in a way related to what Jacob Frenkel said earlier, that each country needs to address its own challenges. The first remark is that it is clearly possible to fight the global financial cycle. The most striking chart for me in Governor Kuroda's slides was his Chart 2, which shows that the long-term interest rates in Japan have actually declined somewhat in the past two months, while bonds, USTs and gilts have gone the other way. It is possible, not saying whether this is optimal, but it is possible.

The second point is that there are two related issues that have not gotten much attention in our discussions the past day and a half, but were raised in this panel. Charlie Bean raised one of these, talking about foreign currency financing and the move toward foreign currency financing if you think the exchange rate is going to depreciate. That of course is related to the carry trade. And there are a number of emerging market economies—I won't name them, you know who you are—that have suffered a lot from these closely related phenomena that are both related to the violation of uncovered interest parity, which we see all around us. I think it would be interesting to hear the panelists' views on how you can fight back. What are the best ways of protecting yourselves, directed mostly to Luiz on behalf of the emerging markets, against the dangers of foreign currency financing unhedged by domestic households and firms, and against the carry trade, which can reach very substantial volumes?

Mr. Kroszner: First for Charlie Bean, raise some of the potential issues or unintended consequences of the forward guidance. I like to call those open-mouth operations because you're talking about, you're opening your mouth about the open market operations you might be doing down the line and in particular, giving more specifics about what data one is going to look at, you raise the possibility that maybe there would be greater responsiveness or excess responsiveness to those particular pieces of data when you're much more specific than before. It might be interesting to look at that more systematically. I think with what you have done in the U.K. and what we've done in the U.S., as well as elsewhere, when these particular pieces of data are called out, we can look at the responsiveness to news about that data to see how it would with greater responsiveness with as greater volatility associated with those. Annette Vissing-Jorgensen and Arvind Krishnamurthy have done a little bit of work on some of the announcements that have been done in the U.S. about looking at not only the level effects, which they had reported in the paper here, but also on volatility effects, which might be very interesting to look at.

Second, for Governor Kuroda, as you'd mentioned, there's a potential tension between the success and keeping the long rate low and

dramatically changing inflation expectations, which is a very important part of the policy also. And so, I wanted to get a better feeling for how you might be handling that tension as nominal interest. There's going to be a real strong force for nominal interest rates to rise if the policy is successful as there's greater demand in the economy for investment consumption, etc. And also, think about the consequences for the financial system because interest rates have been low for so long that many institutions might potentially become significantly impaired if there is a move of let's say 100-200 basis points up in the long rate, which ultimately is what I think you would hope to have happen.

Third, for Luiz Pereira da Silva, the issue of the political economy of macroprudential policy, I think is a crucial one, not only for emerging markets, but also in the U.S. It's very difficult for the unelected body of the central bank to suddenly say people shouldn't be moving into houses anymore, or people shouldn't be owning cars. And so, often, there's a tension between the macroprudential policy and what other policymakers want. But I want to get your perspective on how difficult that is to implement in a place like Brazil, and I think it also relates back to Martin Barnes question about independence of monetary policy, because by getting into macroprudential issues, you're getting into political crosshairs, and even though that's an important part of what's necessary to be done, there are also some dangers associated with that.

Mr. Stark: The global monetary policy stance is extremely expansionary. In line with what has been said by Jacob Frenkel, this was totally justified in 2008-09 after the collapse of Lehman Brothers that ended in a global recession. But the question is whether this is still justified today. Let's assume an extraterrestrial economist visiting the Earth, making an assessment on the global monetary policy stance would come to the conclusion that the world is in a deep depression. This is not the case. But many policymakers and governments put pressure on central banks to be even more accommodative because they are concerned about the relatively weak recovery after this deep recession. Charlie Bean referred to the Andrew Crockett Memorial Lecture by Raghuram Rajan. Rajan is right. There are reasons why

we are in this position now, having relatively low growth. It is because we went through a systemic crisis. Economic history shows that after such a systemic crisis it is very likely that we will have to live for some period of time with lower growth rates. The excesses of the past have to be corrected. We are still in this process and there is little what monetary policy can do about it. Against this background, I think we have to be aware that the short-term gains of the unconventional monetary policy measures—and I include here the extremely low interest rates as well—come at a cost in the longer term. Keeping interest rates too low for a very long period of time is going to lead to unintended consequences. The focus at present is on the short-term gains. But the short-term gains have to be measured against medium to longer-term negative consequences and I think there are a lot of issues here like the perverse incentives for banks or the perverse incentives for fiscal authorities and other issues that have been mentioned by Charlie.

My point is the following: With these unconventional measures, markets and governments have become more dependent on central bank action. One can also say they have become addicted to central bank action. And the market mantra still is more liquidity, cheaper liquidity, for longer. Central banks continue to follow, in most cases, this market mantra. At the same time, and this is a question now in particular to Charlie Bean and Governor Kuroda, and it was already raised by a previous speaker, what about the independence of the central banks? In becoming political players have central banks sacrificed their independence of political influence? Have central banks come under fiscal dominance? I have a clear view on this, but I'm interested in the view of the panelists. And what does this mean for our very fragile monetary regime we are in, namely the fiat money regime?

Mr. Bean: The question of central bank independence, let me start with that. Clearly, the last five years have moved advanced economy central banks into territory that they would not normally inhabit. That's not only been the case with the actual instruments they've used, which have strayed into territory that is close to the fiscal authorities but also, because of the depth and the duration of the

episode, things like the distributional consequences that Martin raised have come to the fore. Normally people accept that there are distributional consequences from monetary policy, because they're relatively short-lived in a normal business cycle. But because they've gone on for so long in this downturn, it becomes much more of an issue for public debate. Certainly in the U.K., the distributional consequences have become increasingly prominent in the debate about the use of unconventional policies.

I think I'd also want to add to those things. Central banks have taken more and more credit risk onto their balance sheets. That takes them into territory which really ought to be inhabited by the fiscal authorities. Now, we've tried to keep a pretty clear demarcation line at the Bank of England, as whenever we've gone into that territory, we've insisted on there being an indemnity from the Treasury. But the Fed has clearly taken credit risk onto its balance sheet, and you can easily see politicians saying that they're the sorts of decisions which ought really to be taken by politicians. So I think it has certainly been true that we've strayed into this rather gray area.

I think Jürgen Stark raised an interesting question here about fiscal dominance. I don't think there's an issue about fiscal dominance at the current juncture, at least for us, although people may have different views in other jurisdictions. But of course, as we move toward exit from unconventional monetary policies, we will expect to be selling gilts back into the market and that's going to push gilt yields up. Clearly that is something that the government is probably going to be less happy about us doing. So I could see the tensions being greater further down the road. Now this wouldn't be what I would call fiscal dominance in the technical, academic sense of the term, but certainly there will potentially be heightened tensions with the fiscal authorities on the exit from unconventional monetary policies.

On forward guidance, Randy Kroszner, I think, makes a good point that if you have the sort of threshold-based guidance that the Fed has, or we've now adopted, then that will lead the markets to start paying more attention to the indicators that we've said we'll focus on. And there has indeed already been commentary in the U.K. from

market participants along the lines of “Oh, we’re now all going to be looking at the LFS unemployment rate and the inflation expectations measures that the Bank has said it’ll be looking at.” And you’re absolutely right that you would therefore expect to see increased market sensitivity to the releases of those data points.

Mr. Kuroda: First, let me respond to the points raised by Mr. Portes and Mr. Kroszner related to the long-term interest rates in Japan, which have been quite stable and low, despite improved economic outlook in Japan and despite sharply rising interest rates internationally. Yes, the massive purchase of long-term government bonds by the Bank of Japan, I think, has been exerting stronger downward pressure on the nominal interest rates in Japan. And so far, we have been quite successful in doing so, but of course in the medium to long run, particularly when inflation expectations are adjusted toward the 2 percent inflation target we adopted on January 22, nominal rates could rise, although not as much as fundamentals would demand because the Bank of Japan would continue to make huge JGB purchases month after month, at least in the next two years. But I agree that there is some kind of tension between raising inflation expectations and maintaining extremely low long-term interest rates. But, as I said, so far we have been quite successful and we think that at least in the next two years or so, we would be able to contain an increase in long-term interest rates so as to maintain low real interest rates. At this stage, I think they are in the negative range and that could be sustained in order to raise inflation toward 2 percent in two years. By the way, the Bank of Japan has made some kind of macro stress test of interest rates rise on financial institutions’ capital and so forth. And we found even a 300-basis point rise in interest rates would not seriously affect the Japanese financial system, although there may be some small banks which might be affected, but at this stage we are quite certain that even if long-term interest rates eventually go up, the impact on the financial system would be small.

Second question raised by Mr. Stark, related to unconventional monetary policy—whether it’s justified now or not. I think as far as Japan is concerned, it’s completely justified. Japan has at this stage no financial system problem. The financial system is quite sound.

The corporate sector has quite a healthy balance sheet. The problem is basically the government. The government has a huge deficit and accumulated a huge amount of debt. That is a problem. But, as far as the private sector is concerned, there's no systemic risk. The problem is continuous deflation. Deflation started in 1998 and continued until quite recently. And this continuous deflation, as I said, has posed a serious problem for the Japanese economy. The current monetary policy hence aims to eradicate deflation from the Japanese economy so as to maintain a 2 percent inflation target in a stable manner in the coming years.

Mr. Pereira: First, on Jacob Frenkel's question about Brazil being worried of its currency moving up and down, the concern is indeed about volatility. I think you need first to keep the fundamentals strong and then you also need to show that you are capable of reducing volatility, smoothing the speed of adjustments of currency movements up and down, because you know that they create risks on the way up and on the way down. And that volatility affects financial stability, so smoothing and making sure that there is a sort of progressive understanding of the directions required by fundamentals without threatening financial stability, is I think paramount.

Second, on the unhedged borrowing in emerging markets and the remark that there is a danger of excessive forex financing by firms, yes, I agree and in Brazil we put limits on this. We have limits on holdings of public and public debt in terms of foreign exposures. We have requirements for hedging. And we also have at the disposal of the regulator at the central bank a very broad coverage of financial and credit data on firms to know and understand exactly the positions of everyone in terms of forex exposures. We have mandatory obligations to register all credits and all derivatives in trade repositories and to trade in CCPs, so we have the information and infrastructure to monitor systemic risk in the economy. This is very important if you want to conduct proper macroprudential policies.

And third, on the political economy issue and implications that macroprudential policies might produce, I think you have to pinpoint areas where there are excesses even if exactly these areas are sensitive to these kinds of political economy pressures. In Brazil, for

example we had car loans. Car loans were being originated with maturities that were too long and incommensurate with the life span of the collateral (the car). Therefore we saw that we have been having too risky loans with excessive long maturities. We had imprudent behavior and we corrected that with specific measures on capital requirements to lengthen the maturities of these specific loans. So, despite the obvious appeal for these loans, our macroprudential measures could be well understood and seen as plain vanilla.

Mr. Kocherlakota: As I was listening to a great panel discussion and also the earlier papers today, I was struck by, I think the term unconventional monetary policy is really masking the real issue. Really we should be thinking about the forces that are giving rise to the unconventional monetary policies, really being at the heart of a lot of the issues we're talking about. So, let me start with what Charlie Bean was saying today. You know, what hit us was a deleveraging shock in the wake of September 2008. Now what should happen in the wake of such a shock is what would a Walrasian auctioneer do, a mythical Walrasian auctioneer do? That Walrasian auctioneer would be lowering the real interest rate. Presumably there would be critics saying you shouldn't be lowering the interest rate, there should be much more pain being suffered by the economy, but that's what the Walrasian auctioneer would do to facilitate the market response. The goal of monetary policy is to try to approximate as best as possible that Walrasian auctioneer, given the problems of sluggish price adjustment, sluggish wage adjustment, and sluggish inflation expectations adjustment. So that's what monetary policy has been about in the developed world. You can ask, Have the Fed and other central banks lowered the real interest rate too much relative to what a Walrasian auctioneer would do? You could try to get after that by looking at historically estimated relationships that relate monetary policy to macroeconomic variables, but it seems really a stretch to think that those historically estimated relationships would be valid across all economic environments and after all shocks, and especially after the kind of shock that we've just seen. A better way I think is to look at our outlooks, the future of prices and resource utilization. If you look at the United States, inflation is going to remain low; resource utilization is likely to remain low. I think the same can be

said in Europe as well, and in Japan. So we talk about the side effects. I think what we're seeing is in fact we've not been able to lower real interest rates as much as we would like to, given we want to mimic what the Walrasian auctioneer would do. So I don't think we should be talking about the side effects of unconventional monetary policy. I think these are really the side effects of a low global natural real interest rate environment. These would exist even if we had the Walrasian auctioneer trying to clear markets. We would have discrepancies between what's going on in the developed world and emerging markets. The global natural real interest rate has fallen because what has happened in the developed world, but the emerging markets suffer from those shocks as well. This is not a situation that is likely to resolve itself in the next two months of Fed decisionmaking. The natural real interest rate is low now, and it's likely to remain low because of these forces. The macrodynamic forces that gave rise to the low natural rate of interest are likely to be with us for some time. When you listen to a lot of the discussion that we had today, what do we take away? I think supervision and regulation is going to be incredibly valuable now and in the years to come. I think H el ene Rey's recommendations for emerging markets are likely to be extremely important as this global natural rate of interest rate remains low. You hope that the developed economies, as Governor Kuroda alluded to, find ways to raise their natural rate of interest by expanding the supply of safe assets in some way or by boosting growth. But I think the right way to be thinking about this is not so much focusing on the policies, but rather realize those policies are the responses to macroeconomic fundamentals and those fundamentals are likely to be persistent for some time to come.

Ms. Reinhart: Very briefly, my two questions are to Mr. Pereira. They deal with the inflation growth tension during capital flow reversals. This is applicable to Brazil, but also to other ENs. Being on the high end of inflation targets and facing large depreciation, what gives interest rate defenses are all so costly? That's point No. 1, and question No. 1. Question No. 2. Also, Inter-American Development Bank has done in the past some work suggesting that if one looks at commodity adjusted current account deficits and commodity adjusted fiscal finances, they would look a lot worse if commodity

prices were to slide and if you could please comment on that since that obviously would have an impact on monetary policy and how accommodative monetary policy would have to be.

Mr. Kim: I don't want to leave the room without saying this to Charlie Bean. I found your presentation extremely useful and I learned a lot. And we have talked about UMP and the zero lower bound or communications policy including forward guidance all the time, during all of yesterday and today, and actually since a few years back. We have learned a lot from it. But all of these are issues related to advanced economies and in your presentation you made an excellent summary, but when you talked about the international perspective of QE, I would like to say that that is the perspective from the view of advanced economies, and I'd like to state one different view from the view of non-QE economies. You said, and of course other sources have said, that UMP was implemented under the condition that most countries faced the zero lower bound. What I'd like to say is that even non-QE countries these days face effective lower bounds, which are comparable to the zero lower bound. You may assume that other non-QE countries can introduce their own instruments for unconventional monetary policies these days, but in reality that is not necessarily the case. Take a look at the policies of some countries in this room. In the Asia Pacific region—to be more specific, Korea, Thailand, Australia, New Zealand—we all have the identical policy rate, 2.5 percent. And if I expand on it a little bit, by 0.5 percentage point, I can add a few more countries, including Malaysia and others. All are centered around 2.5 percent. Why do so many EMEs have similar policy rates is more of a practical and empirical issue, but to make a long story short, I'd like to say that we have all faced lower bounds, effective lower bounds. Then what is the difference between QE and non-QE countries? QE countries have the luxury of using their key reserve currencies, whereas non-QEs don't. And evidently there must be some interest rate differential between QE and non-QE countries. And so this gap is one reason that 2.5 percent may be the lower bound. Now what can we think about the instruments of unconventional monetary policies for those non-QE countries which have actually faced effective lower bounds? Because we don't have key

reserve currencies, we cannot have the privilege of using our currencies for so-called QE due to the limitations on the monetary policies of non-key currency countries. And so we now actually shift our policy attention more to credit policies from monetary policies. So I hope this is good food for new thought, and I do hope that you can elaborate on these issues later.

Mr. Pereira: On the question from Carmen Reinhart, there is a general re-pricing of our emerging market asset classes throughout the world, so it's natural that you have the process that is going on. And trading of, including exchange rates, will be sort of happening progressively at new levels. What we I think are trying to do, which is important, is to again avoid financial disruptions, avoid financial instability, smooth the movements, move according to the class of assets they represent. And of course, we are doing so while minimizing the pass-through of this into your domestic prices. This is a sort of textbook answer to this. We are taking the appropriate and the adequate monetary policy action in terms tightening. We initiated the process, we will have meetings throughout the next month so that's I think a quite straightforward answer to that. The commodity of price issue is one that I think we are analyzing carefully given the developments in terms of the slowdown in other emerging markets, such as China. We think that's going to be not a hard one, but a process of changes in the growth model there.

Mr. Kuroda: Just one comment on the so-called unconventional monetary policy. Yes, it is unconventional, because faced with the lower bound, some other measures other than reducing the short-term interest rate are necessary. But in a fundamental sense, unconventional monetary policy is not unusual. It's a natural extension of monetary policy faced by the zero lower bound. So, from that, I can say that central bank independence is not particularly damaged by unconventional monetary policy. Central bank independence can be damaged even under conventional monetary policy.

Mr. Bean: Okay, just let me connect Narayana Kocherlakota's comment with Governor Kim's and also Jürgen Stark's stance coming earlier on. I think Narayana Kocherlakota actually hits the nail

on the head. The essence of the problem here is an underlying, very persistent shock which is lowered. Not just the equilibrium real interest rate in the economies directly affected—the U.S. and U.K. and parts of Europe—but the world economy. And that’s probably why equilibrium rates need to be low in Australia and other countries that Governor Kim listed. I was talking from the vast economy perspective and knowing that, well, I thought Governor Tombini was going to be on the other side of the podium, but Luiz obviously talked about the emerging market perspective. I don’t know enough about the details of individual emerging market countries to know what would be the right source of policies, but I would assume that there are analogous policies to the sorts of asset purchases that we in the Fed have made that could be appropriate in those other countries. There may be slightly different assets that it’s sensible to buy, but maybe that’s a good topic for next year’s symposium.