General Discussion: U.S. Monetary Policy and International Risk Spillovers

Chair: Janice C. Eberly

Mr. Goldfajn: I very much liked the paper. It's a paper that touches exactly on what emerging markets, at least, are very concerned—first, spillovers. We are seeing that we do have quite a bit of spillovers, the fact of monetary contractions and expansions in the United States (or other advanced economies) have a more than proportional impact on emerging markets. You find that a 100-basis-point increase has an impact of more than double interest rate increases in emerging markets, and this of course has implications for output and the business cycle.

Second, you say that a floating exchange regime mitigates this impact, which is true. That's why a large number of emerging market economies has shifted toward inflation targeting regime cum floating exchange rate. However, I would like to point out that a floating exchange rate is not a panacea. We have quite a bit of research showing that the expansionary impact of exchange rate changes are much lower than believed. First, because of the exports are based in dollar invoicing. Second, because a lot of the trade is part of long global chains. Also, large part of emerging markets have dollar debts because this is the global currency, which mitigates the benefit of depreciations. Others have past histories of inflation, so when you get large depreciations, people associate with more risk and start to

be concerned. So, I believe that when you find that the floating exchange regime economies in general do better, it's because they are also the ones that probably have better institutions, not because the exchange rate mitigates the spillover impact so much. So, the implication for policies is that you should create and solidify institutions. OK, but what does this mean?

One last point, Hélène Rey says policymakers should rely more on macroprudential measures. Yes, but what does this entail? So, the ultimate question for you is, what is the actual (detailed) policy implications of the paper?

Ms. Gopinath: Yes, I think this is a terrific paper because it actually sheds light on an important debate that has been going on. Several emerging market policymakers would argue that one of the reasons you don't let the exchange rate depreciate too much and you intervene by raising interest rates is precisely to smooth out risk shocks. The concern is that if you let the exchange rate deprecate too much, you might un-anchor expectations about the exchange rate, and then you can get into a bad spiral. What Şebnem Kalemli-Özcan was showing here is that maybe that's not the case; flexible exchange rates are actually smoothing risk shocks.

Now of course, I think the question that Ilan Goldfajn raised is that there is endogeneity about the exchange rate regime. So, I think empirically, the debate is probably still out there.

The second important point that I took away, which I think is an important challenge for policymaking, is the fact that when you start thinking about exchange rate policy and interest rate intervention you can't separate that from what you do on the macroprudential side. What you're basically saying is that if you tend to be in an exchange rate market, then that could endogenously build up risk through more foreign currency debt accumulation. So, that has implications for what you do on the macroprudential side. The sense that we need to think of all of these instruments jointly becomes even more important.

Mr. Kamin: I also liked this paper very much. It's very useful in terms of fleshing out the impact of monetary policy spillovers on

emerging markets. I would note that like most of the literature on these spillovers, it kind of treats increases in U.S. interest rates as an exogenous shock. But usually, or almost always, increases in interest rates and changes in monetary policy are endogenous with respect to other developments in the economy. So, I wanted to pose the question of whether it doesn't make a difference whether increases in U.S. interest rates, for example, are motivated by increased growth, which could have positive spillovers to emerging markets, or, conversely, by increases in expected inflation or perhaps hawkish shifts in monetary policy, which would have less positive spillovers. I should add that some research my colleagues and I have undertaken on this subject does seem to suggest that increases in interest rates that are associated with positive expectations for growth have less adverse spillovers than those associated with higher inflation.

Ms. Kalemli-Özcan: Thank you very much, Hélène. These are great comments; all are well taken. One thing I want to say is that I can definitely add the policy response in emerging markets and advanced economies as a response to U.S. monetary policy changes, and that will help us also to understand what are the mitigating factors for the real effects. I started doing this. When you just do a similar local projection that I showed you for interest rate differentials for the policy rates instead, you see that the average policy response is loosening, which is consistent with what you are suggesting and also consistent with Barry Eichengreen's work that documents that the average policy response in emerging markets to capital outflows, sudden stops, and increased risk, is loosening of the policy. But of course, this is an average response and there is a lot of country heterogeneity in the data as you pointed out. So, there are also countries that are tightening. I would argue that given the average response is loosening, the big increase we see in the differentials is really coming from the risk premia, and this is why other policies such as macroprudential combined with better institutions are important to decrease the risk sensitivity. This issue also relates to the first question. I agree that inflation targeting is the way to go, but it's not a panacea. Floating exchange rates still help. We know from Gita Gopinath's Jackson Hole paper that expenditure switching effects of flexible exchange rates are weak. The point I'm trying to make here is that floating

exchange rates help you for another reason. When you float, you don't use the interest rate to dampen the depreciation and appreciation. In a world where the investors' attitude affects what is coming in and out of your country through endogenous Uncovered Interest Parity violations, the change you need in your domestic policy rate to deal with this problem is so large that you are going to hurt the domestic economy. That's the point here. In that sense, you will still get something out of the floating exchange rates.

So, Gita's question, again this is related. I agree that the debate is still out there, but I would like to emphasize this point that what makes the domestic monetary policy ineffective in emerging markets is exactly why flexible exchange rates is also going to help them. This is important because this is not something that is highlighted before. The story here is that you have these risk shocks affecting your domestic financial conditions, regardless of what you do with your policy, so you have to go at the problem with several policy options. One is the floating exchange rate, the other one is the macroprudential. And I fully agree with your comment that this has to be done in an integrated policy framework, which I believe that you guys are working on. Of course, everything is endogenous and your policies will affect the accumulation of the foreign currency in your economy. Again, the point is if there is a risk-off type shock and your currency is deprecating, the first response shouldn't be hiking your domestic policy rates. That's the point that I want to emphasize.

To Steve Kamin's point, I fully agree that U.S. monetary policy changes are endogenous to developments in the U.S. economy, which is why the exercise that Hélène pointed out as one of the key results in the paper is important. In this exercise, interest rate differentials are increasing in emerging markets as a response to contractionary U.S. shock, and in advanced countries the opposite happens. This exercise is done based on the state of the art knowledge in the U.S. monetary policy transmission literature using the surprise changes to U.S. monetary policy. To identify the surprise changes to U.S. monetary policy that are independent from the state of the U.S. economy, you observe what happens to fed funds futures in a tight 30 minute window of the monetary policy announcements. Having said that,

I fully agree with you that if the monetary policy action is based on growth versus risk management there might be differential effects and that's what you show in your work. But I still would like to emphasize that in the standard spillovers work the risk channel that I am emphasizing here is absent. Which is why you obtain the result that spillovers from U.S. policy are small. The point in my paper is once you put this risk channel, you don't need to assume anything about the parameters. Even powerful expenditure switching effects, you will still get this detrimental large output effect in EMs with a contractionary U.S. policy. Risk spillover is a powerful mechanism both theoretically and empirically.

Mr. Syverson: I just want to pick up on Ilan's point about the search for the mechanism tying monetary policy to risk perceptions. And you talk about institutions and I think that's completely right to connect institutions to risk. I sort of think that at a first order that's about the level of risk, but the empirics in the paper are about responses to changes in risk. Is there a mechanism that somehow translates differences in levels of risk across institutions into these responses to changes? That would, I think, make that story hold together a little bit more tightly.

Mr. Coeuré: I also liked the paper enormously, and the conclusions are very clear. It was very helpful. I have two short questions to better understand the policy consequences. First question is again on the broader discussion on flexible versus stable interest rates, which your paper is another contribution to. The way I read the paper is you say quite forcefully that flexible interest rates are a useful buffer against risk shocks. But then we also have this body of literature that Gita and others have contributed to saying flexible interest rates are not that much of a buffer, and not as efficient as we used to think against real shocks. So, how do you balance the two mechanisms? And is there any kind of metrics that we could use to come to a conclusion here to balance the two?

Second question, to elaborate on a point made by Ilan on the composition of capital flows, another kind of player we see in emerging markets. And that's also important in terms of a policy prescription on how to make these financial systems more stable. One possible

interpretation of your paper, and you hint at somewhere in the paper but there is no empirical backing for it, is to say as a marginal buyer or seller has changed, it used to be Citigroup and now it's Black Rock. I'm simplifying a little bit. Black Rock is more sensitive to the VIX, and so that's why risk sensitivity has crept into the emerging market, to get into international capital flows, and that's why we see all these mechanisms in Şebnem's paper. So, is there any empirical evidence backing it, or anything that you could say to speak to the importance of the players we see? That has enormous importance if we want to make emerging markets work and cause more emerging markets to be stable, because that has to bring us to the realization of shadow banking not market-based finance instead of circulation of bonds. We have to know.

Mr. Shin: I can follow up on Benoît's question and also to Chad Syverson's point. I think the focus on risk taking is entirely appropriate and I think this is a very nice paper in that regard. I think one thing that we can really add to this discussion is the importance of local currency bond markets. That's now become very central. Many emerging market sovereigns now borrow predominantly in local currency, and I think it also shows that original sin, the original Eichengreen Hausmann sense has well and truly been overcome. But, maybe that's just only the surface in that if we think about the players involved, and we think about the asset managers, they're no longer banks. But if they come into the market on an unhedged basis, the hedged investment we're going to talk about tomorrow with Hanno Lustig and Arvind Krishnamurthy's paper. But if they come in unhedged, there is a currency mismatch implicitly on the investor's balance sheet because their obligations to their beneficiaries are in their own currencies. I think the risk management of the investors will be very focal in a lot of these discussions. I think this is also what Hélène mentioned in her discussion. And if we can focus more on that and extract a moral lesson that will be really shedding a lot of light.

Mr. Prasad: During the period that you covered, Şebnem, there were interest rate increases as well as interest rate decreases in the United States. But in the perception of international investors, risk is not symmetric, and it must make a difference. Also, for emerging

markets, managing exchange rates that are appreciating is a very different beast from managing exchange rates that are depreciating. So, the question is whether these results are really symmetric as suggested by the exercise. One thing I noted in Chart 7 is that there is a strong, positive correlation between risk and policy divergence in EMs with managed floats and that this not been the case in EMs with free floats. However, something seems to change in 2012 where things become exactly the opposite. I wonder if that can be connected to one of Hélène's points that it's not just U.S. monetary policy but also monetary policy in the other advanced economies, the G-3 central banks in particular, that matters. And then that brings up the question of what the emerging market currencies that manage exchange rates are managing against, which again is related to the point that perhaps some emerging market central banks are managing their currencies against the euro. Meanwhile, some may have thought they were managing their currencies against the renminbi while in fact they were managing them against the dollar, but the classification could make a difference in terms of the results.

Mr. Frenkel: My comments deal with the relationship between monetary policy, inflation targeting, and the extent to which changes in the nominal exchange rate pass through domestic prices. One of the most important strategies adopted by emerging markets to enhance the credibility of monetary policy is the strategy of inflation targets. That strategy introduces transparency, and adherence to it contributes to credibility. A sharp change in the nominal exchange rate, is typically transmitted to domestic prices. The extent of this transmission (the pass-through) depends on the credibility of monetary policy. When the latter is guided by a credible inflation targeting strategy, market participants will expect that the central bank will ensure that domestic prices will not change to the same extent as the exchange rate has changed, since otherwise the inflation target will not be achieved. Hence, when the inflation targeting strategy is credible the degree of the pass-through of exchange rate changes will be minimized. This mechanism has proved to be very powerful and effective in emerging economies and has aided them to reduce inflation and achieve price stability. The fact that under such circumstances, nominal exchange rate changes are not being upset by

corresponding changes in prices and wages, contribute to alleviate the "fear of floating" and allows the exchange rate mechanism to operate effectively in the process of adjustment. My final remark relates to the currency-denomination of foreign debt. When an emerging economy borrows in foreign currency, any change in the nominal exchange rate impacts on the domestic currency value of its debt. This feature is another factor in the "fear of floating." To alleviate this characteristic, it would be desirable that the borrowing country has a sufficiently stable monetary system so as to enable it to borrow in domestic currency.

Ms. Kalemli-Özcan: Let me start from the start, Chad's question. I fully agree. That's a great comment. I don't know any model doing that. This is one of the things I'm working on. In the model of the paper there's nothing about the level of institutions. In the data exercise, it is the change because I use the EMBI Index. This index changes a lot over time. One thing I did but did not have time to show is to check whether the change in the EMBI Index that captures the changes in risk premia shocks are much larger in countries with the lower level of institutions. And they are. Clearly more can be done in terms of the framework, and this exactly ties back to Hélène's comment that this will help us to understand the underlying mechanisms.

Benoît's question. I would like to clarify three things on flexible and fixed exchange rates. First of all, in the paper I never compare fixed and flexible rates. From the get-go, fully fixed hard pegs are dropped; everything is done basically with flexible exchange rates. So, this is actually different than what Maury had done because in their paper they do compare fixed and flexible. In a lot of this literature that is written after Hélène's work on monetary autonomy, this is the standard comparison. I don't do that. I compare within the countries who say they float, the ones who managed their exchange rates and the ones who do not.

Second, I am trying to show another role for flexible exchange rates. So I'm saying something different. If we look at countries who officially float but who also manage their exchange rate by using monetary policy, we see that these countries suffer more in terms of growth, so this is a counterproductive policy. And third, these findings do not

mean that they shouldn't try to manage that volatility and it doesn't mean that volatility is not hurtful for their economies; it's just that using monetary policy as the instrument for managing exchange rate volatility is something that we should think twice about.

Now, the second part of your question is extremely important. The players. In the paper, I don't do Citigroup and Black Rock—remember, my period starts in 1996. But, I show clearly that, as you suggest, the players changed for emerging markets, not maybe from Citigroup to Black Rock, but from sovereigns to private. That's an externally important development and compositional change for emerging market capital flows because when the sovereigns were borrowing, it's just the government transaction, where the effect in the real economy is through government deficits. When the private sector is borrowing, first of all there is extreme sensitivity to risk shocks. Second of all, your domestic banking sector becomes instrumental. So that's superimportant and I hope to do more on that in the future.

This links to Hyun Song Shin's question on the local currency bond market developments. I fully agree. Once we have your domestic banking sector and domestic local bond markets in play, then there are all sets of issues that we have to think about. One is domestic banks' funding costs, and that's actually what I do in another paper using detailed administrative micro level data, that domestic banks can fund themselves cheaply during periods of risk-on shocks and then pass-through these low funding costs to borrowers as low lending rates. Banks are hedged themselves for the currency risk through banking regulation, but the nonfinancial firms are not hedged. Same with the local currency bond market. We can have the mismatch both on the investors' balance sheets and on the borrowers' balance sheets. But again, the implication of my results is that it might be better to deal with these balance sheet issues with other tools and not with the monetary policy rates. That's what I would like to reiterate.