General Discussion: The Once and Future Global Imbalances? Interpreting the Post-Crisis Record

Chair: Randall S. Kroszner

Mr. Coeuré: I think this paper is very useful to put structure on the discussion on current economic imbalances. I just wanted to push Menzie Chinn and Maury Obstfeld a little bit further on monetary policy, just building on what Maury said in his comment. From an advanced economy perspective, we're not worried that much by foreign interventions obviously, but the question is about QE and the impact of QE on international capital flows and through international capital flows on current account balances bottom up through the capital accounts. It seems to me that a lot depends on the answer to the question of whether QE works through changing interest rate differentials at the long end of the curve, or whether it also works through a portfolio advancing, international portfolio advancing. We don't know that much about it. When you look at the existing studies on the impact of QE announcements for an exchange, as far as I know, it's mostly based on even studies, and it mostly concludes that it's about a signaling effect on future interest rates more than portfolio advancing. But this has huge consequences for security capital account and also for current account balances. I just wanted to have your view on which side would you take in that discussion? And does it explain what we've seen since 2010? Is it a big part of the story or not?

Mr. Spriggs: Professor Chinn, since you raised the sort of basic Econ 101 analogy, I mean, should we also think that the currency should adjust, right? And that's sort of the basic story often told. There's the question of why doesn't the U.S. dollar devalue enough to offset this permanent position, and the concern being that the bigger imbalances with the United States are more specific than against all currencies? This would have a disturbing effect for many countries if the U.S. dollar fell. But my question is, have you looked at this from the structure of what causes the deficit? In the case of the United States a lot of this is global value chain. The United States runs huge deficits in auto parts, and from the consumer perspective-as any American consumer can tell you-when you go into a store, you're going to be very hard pressed to buy something American. It isn't that if we simply lower consumption, we would do away with the deficit. In fact, you could shrink it, but you're really talking about lowering consumption. If the United States is an outlier, do we really want to do this through fiscal policy? Do you really want to say, we want to constrain consumption in the United States? The other huge residual you haven't given us the story to explain, is it really the case that we're going to be able to address that imbalance? And instead, should we be looking at the structure of that imbalance and understanding why is the United States an outlier? And I would again contend that it really has more to do with the structure of global value chains with the United States.

Mr. De Gregorio: It's a very interesting paper and discussion, and I want to follow on two points that Maury raised on commodity terms of trade and reserve accumulation. Regarding terms of trade, the regressions include the volatility of the terms of trade to capture some form of precautionary savings, but I think that you should also include the level of terms of trade. As one can see, for example, in figure one, the current account of oil exporters follows very closely the commodity price cycle. So I think that that's an important omitted variable in your regressions. Regarding net official flows, in a world of high capital mobility, accumulation of reserves would be compensated by capital inflows with no effects on the current account. What you find in your instrumented regressions is that in order for a country to reduce the current account deficit by

1 percent of GDP, it would need to accumulate 1.2 percent of GDP of reserves. Accumulation of reserves would be even more effective than increasing public savings to change the current account, which is the savings-investment balance. This portfolio adjustment would have more effects than directly changing public savings. This is very puzzling result. For net official flows to be very effective, you would need strong effects on exchange rates and competitiveness. That's something that Maury also mentioned in his comments. It's very difficult for me to think what's a mechanism for the accumulation of reserves to have such a strong effect on the savings-investment balance. Perhaps this is also related to commodity exporting countries. During the commodity price boom most commodity exporters improved their current account balance and at the same time most of them accumulated massive amount of reserves. So we cannot rule out spurious correlation.

Ms. Kalemli-Özcan: I think it's a very nice paper and an excellent discussion from Maury. I would like to underline this point Maury already made and add to it. I believe we care about current account imbalances because they imply imbalances in gross liability and asset positions. And we care about them because they have implications for global financial stability. So in this sense, I'm wondering if you have looked in terms of decomposing further how much of these imbalances are through official flows and through private flows. Maury already has a very nice chart in his discussion (Chart 2) that shows us they are mainly banking flows, but they are also government flows, which are a big part of total flows, and they crashed of course during the financial crisis, and then they started increasing again. So in that sense, decomposing both portfolio and other flows in-banking flows, government flows-it's important. Why you want to know that, because we want to know the numbers. So in your current regressions, you already show a role for official flows, but we don't know what the numbers imply because these things are very correlated, coefficients are not standardized, so we don't know which one, banking flows or government flows, is the most important. It might very well be, going back to Maury's comments on reserves' role, maybe everything is really explained by official flows.

Mr. Feldstein: I want to ask a question about what I think will be a large shock to U.S. capital flows in the next year or two. As you probably know, the foreign subsidiaries of U.S. corporations now have about \$2.5 trillion of assets invested outside the United States. That's a reflection of the U.S. tax laws that penalize repatriation. I think we're likely to see a change as part of the tax reforms that the congress has developed. I think we're likely to see a change that will put the U.S. tax rules in the same form as other countries around the world. That is a territorial system. That will eliminate the penalty for firms, U.S. subsidiaries abroad, it will eliminate the penalty for repatriation and it will give a strong incentive to bring back this existing \$2.5 trillion subject to a relatively low tax. The question is, how much should we worry about this potential? How destabilizing will it be?

Mr. Chinn: Well, first of all, thanks for all the comments, and particularly thanks to Maury for his comments. I think almost everything that he said is very well taken. Let me talk about first stability of the estimates. Anybody who runs these regressions knows that there's a lot of movement. Maury alluded to the fact that, both distressing and encouraging, the results change as you add more data and you get different data vintages coming in. I would be the last person to say that these results are necessarily stable over time. Let me talk a little bit about why monetary policy doesn't often make it into these types of regressions. There is this long literature on determining the medium determinants of current account balances as a function of these fiscal variables, demographics. Essentially, the hope is that when you take data over five years you're sort of averaging out the impact of monetary policy. If you had wondered why in this literature monetary policy seldom makes an appearance, and even in the Gagnon papers, for instance, the impact is usually assessed at the annual frequency. Here I sort of departed from the literature by incorporating one aspect of monetary policy. It doesn't usually make it in because we're hoping it's averaged out, and the recognition that the way in which the monetary authorities react over time to various influences and shocks is going to vary a lot from 1971 to 2015. One definitely would want to think carefully about how much credence you want to give to the stability of these estimates. The key thing I want to stress in terms of Maury's comments is that I agree that the

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foreign exchange intervention, official flows, the key problem with it is the endogeneity. We have I think, as laid out in the various comments, a lot of uncertainty about why certain countries accumulate foreign exchange reserves. I sort of talked about it in the discussion as if it was a decision made explicitly by the monetary authorities, but sometimes it's sort of the residual. You get a bounty in terms of export earnings, and it just piles up in the central bank and the country authority either sterilizes or not sterilizes. And so all that is left to the side, and in the past we've sort of just swept it under the rug. But if you want to include monetary policy, then those things have to be addressed explicitly.

Let me turn to the other comments. Monetary policy and quantitative easing. Really there was no way to incorporate. We could try to, as in many things, you can add in another variable. But in this sort of framework where quantitative easing isn't undertaken in any of the other countries in the period before the crisis, so in most of the simple it's really hard to just throw in a bunch of zeros and then throw in something that's new. I don't think that in this particular analysis I have anything to say about the impact of quantitative easing in terms of the current account. I can refer you to the other literature work by Marcel Fratzscher, looking at the fact that quantitative easing in the United States, depending upon the sample period, which round of quantitative easing had differential effects on all sorts of asset prices. In the first case, interest rates would go down abroad; in the second case they would go up abroad. Those are the results from essentially the combined event analyses and time series at high frequencies. I think if you want an answer about what happens at fairly high frequencies to the current account, this is not the methodology that gives you any particular answer.

In terms of Bill Spriggs' question about the structural underpinnings, the framework that's underpinning this type of analysis is takes macro aggregates and thinking about savings and investment. That's the way you should think about it. You've got a bunch of variables that can affect saving, can affect investment, probably both of them affect savings and investment, and the current account is essentially the outcome of that interaction between both public and private saving and investment. Where does global value chain fit in, for instance, in that type of analysis? It doesn't explicitly in a way. It's once again hard to incorporate into this type of analysis.

The other comments about commodities. I think that's really important to think about how do we model these effects? One of the things that I didn't get to stress terribly much was that if you look at Chart 1 in the paper, you'll notice that oil exporters' current account surplus essentially disappears. That's essentially your point that a lot of what's driving the current account balances are these things that, I won't say serendipitous, but it's not like something we've fit into our models. If I want to project oil exporters' current account balances in your framework, then I'd have to make a projection about what is going to be the terms of trade oil prices going into the future. That might be the right thing to do; it is in some sense if I had to make a forecast, I would have to forecast oil prices. But it's not one of those sort of systemic forces that we usually throw into the regressions into the analysis. But that doesn't mean that it can't be included.

Then finally, the questions about should you look at flows. Flows are important, net international investment positions as indicators of global imbalances, those are clearly important things for signaling crises or imbalances in general. I'll just say that here, if our focus is on the distribution of aggregate demand around the world which is sort of the key interest to me, then the net flows and then the current account balance is sort of the thing that's of key interest. But I for sure believe that those other factors are important for a whole host of other issues including vulnerability to crises.

Ms. Forbes: I'd like to follow on exactly the last point you raised. In your paper you highlight there are many factors affecting global imbalances. It is a hard topic to get at in one paper in the short amount of time you've been given today. But I would recommend, if you do revise the paper, to revisit this issue you just mentioned of the gross imbalances in capital flows and net investment income flows. As you know, global imbalances and current account imbalances can be decomposed into three components: the trade balance, the primary investment income balance (which is the investment returns on past investments), and then the secondary investment income balance (which is transfers and a lot of other stuff). In the past, it made sense

to focus on global imbalances as largely trade imbalances because it was largely trade imbalances which drove them. But as Maury highlighted and Şebnem Kalemli-Özcan highlighted, as gross investment positions have grown dramatically, larger shares of imbalances are driven by imbalances in these investment income flows, not the trade side. Let me give you one concrete example to make that point of why I think to understand imbalances today, it is very important to fundamentally shift our thinking. The U.K. has had a current account deficit greater than 5 percent GDP, one of the largest if not the largest in the developed world. If you look at what drove the current account imbalances in the U.K. from 1980 to the mid-2000s, it was primarily the trade deficit. Ninety percent of movements in the U.K. current account balance was movements in the trade balance. If you look at it over the last decade, 90 percent of movements in the U.K. current account balance instead correspond to movements in the investment income balance. The drivers have completely shifted. To fully understand the U.K.'s large current account deficit, one of the ones people worry about, you really need to highlight first and foremost what's going on in the investment income side. Some of that isn't apparent in the paper. And even more broadly, you should look at gross positions as Maury highlighted. For example, you should look at the currency composition of these gross positions, international investment positions. You need to look at breakdowns in terms of debt and equity, and then relative returns and how those are affected by increased risk in periods of heightened turmoil. Another concrete example: The United States and U.K. run large current account deficits, but yet for years they didn't see their international borrowing situations deteriorate because they earn more on their foreign investments than they paid on their international borrowing. Those types of issues are becoming increasingly important and really should be front and center in this sort of analysis.

Mr. Lane: I agree with Menzie that having this medium-term framework is a good anchor, but it's only an anchor. It depends on whether you think 50 percent R-squared is impressive or not. In my work with Gian Maria Milesi-Ferretti, what we showed was that that unusual 2003-08 period where the dispersion really went up, it was essentially in the residual: the fundamentals didn't change that much

in that period. The German demographics didn't fundamentally change; the Greece demographics didn't fundamentally change; but essentially imbalances more or less doubled in that period. When we understand why Spain is running a current account deficit of -5, but it's actually running -10. What we did is we took that residual from 2003-08 and that is a really good predictor of the scale of the crisis. So those with excessive imbalances suffered the most. So this discussion about, do we care about current account imbalances, we always have this discussion but, after the crisis, the evidence is overwhelming that the instance of the crisis, especially in terms of consumption even more than GDP, was so much bigger for countries with excessive deficits. I do think looking at the residuals as opposed to saying, "Well, the fundamentals explain everything throughout the whole period," might be more effective. Then it won't be too surprising that I'm going to reinforce Kristin Forbes' view about looking at valuation effects. The last thing is that this current account venture has been around for a long time because the data has always existed on current accounts. But now we have a lot of data on the sectoral flow of funds. So for the OECD countries, we know a lot, and actually one of my Ph.D students has essentially redone Chinn-Prasad for households, nonfinancial corporates, sovereigns. For advanced countries, basically the r-squared is zero for households. So if we think of models where it's the household behaviors driving it, it's not there. It's the nonfinancial corporates and it's the sovereigns is where the expansionary power is.

Mr. Kohn: I'd be interested in getting Maury's reflections, especially Maury's reflections, and Menzie's as well on this difficult problem of surplus country adjustment. Current account deficits can be dangerous. You have to look underneath it to grosses, but they are a risk factor for financial stability. But if the deficit countries start cutting back domestic demand, to keep global aggregate demand and potential the surplus countries need to have more domestic demand. I think this is an even bigger problem with the effective lower bound coming into play more frequently, and it's a little bit like the fiscal discussion we had in the last session. We'll need more fiscal policy, but if deficit countries are at the effective lower bound, they'll have much more trouble expanding through the exchange rate channel, and the

surplus countries are going to have to boost aggregate demand. So, your reflections on somehow convincing the surplus countries that it's in their national interest to make a bigger contribution to global aggregate demand.

Ms. Mann: I have two questions: The first one notes that the terms of trade volatility coefficient switches depending on the country in the set, and that seems to be amplified when the basic model is augmented by the net official flows, and I'm wondering what we should think about that. The second question is, you've spent a lot of time decomposing the sample into different country groups by level of per capita income, but I would be curious as to whether your coefficients are symmetric across the current account surplus and current account deficit countries. We ought to be looking actually at a four-quadrant diagram so to speak, and that might help answer some of the other questions that have been put out with regard to what the current account surplus countries ought to be doing.

Mr. Kamin: I wanted to highlight a little bit the issue of the policy responses and the normative aspects of these global imbalances. Certainly, there are times when current account imbalances are very benign, and perhaps even desirable. Country in a recession might want to have higher net exports; countries that are overheating might better run deficits. Sometimes current account imbalances are actually symptoms of other underlying causes and the policies ought to address those. A country with an asset boom that's bringing in capital, probably better to address the asset boom itself. If there's a lot of currency intervention that's leading to imbalances, it's the intervention that's the issue. And then finally, there are times when the current account deficit poses risks in itself, such as when a country has a great deal of external debt and then the deficit poses the likelihood of a disorderly correction. In that context, I would be interested in knowing how much of the current pattern of global imbalances is actually worrisome and requires direct responses to the deficit, and how much of those imbalances reflect other issues that should be addressed through targeted measures on other aspects of the economy.

Mr. Obstfeld: Marty first—great question that we've thought about a little bit. Repatriation, you know, we think of it as somehow

motion in space, but it's actually an accounting event. So currently, these firms are holding assets abroad in some portfolio. The question is how do they change that portfolio after repatriation, and they might not change it at all in which case it's a wash. They may change it a lot.

On Don Kohn's question, this is one of the oldest questions in international economics. Deficit countries are under pressure to adjust; surplus countries are not. What can we say to them? You know, we grapple with this all the time so one of the things we say is, "Hey surplus country, you're complaining about QE and low interest rates, and if you would save less r^* would be higher and you're pensioners would be earning more." We say, "If you lend to these deficit countries that are going to crash, you may lose your money," and this was what Keynes' argument about keeping savings at home in the 1930s. You know, we also say, "Infrastructure investment. Why would you worry about leaving future generations with debt and not worry about leaving them with crummy infrastructure?" These are all the arguments we make; they typically fall on deaf ears.

Kristin made a great point about the income balance, and where she didn't go and I thought Philip Lane was going to go is the point that if you look at these income flows, a lot of them are from residents who are not actually your nationals. And this is also true when you think about corporate saving which is playing an increasing role in these imbalances. Globalization is making it harder to actually think about the significance for national policy of current accounts, and that's an issue that we haven't touched on.

I will just say in response to what Benoît Coeuré and others said that I forgot to say that Raghu Rajan has of course raised the issue about the effects of QE very analogous to the currency manipulation discussion. That's something that one could discuss in this context. We don't have time to go into it today.

Mr. Chinn: First of all, there were a couple of questions. The issue about decomposing the current account was really important. I think that's something we definitely need to pursue, and on top of it the issues of the valuation and the actual positions. Those are all

important and in fact maybe those are things that you should think about. What's the sensitivity about net international positions to exchange rate valuation and changes, exchange rate changes, and how does that affect for instance the behavior of the current account? If you've been in this business for too long, you start looking at the same things too much. You're absolutely right. Those are things that we should investigate.

On the broader question about, what does the current account imbalance or large current account imbalances signify? I don't have any strong feeling for that. I view big imbalances as a signal of problems; but for the balances that we see now, the question that I think turns at the moment to the issue of distribution of the aggregate demand, some countries that are running large surpluses are principally countries that have had aggregate demand shifted to them and you probably want a more "balanced" distribution of aggregate demand around the world. The estimates give you some idea about how that might be accomplished or might not be accomplished. The political means by which those objectives are accomplished is for somebody else to determine.