General Discussion: Reassessing Constraints on Policy: Fiscal Constraints

Chair: Kristin J. Forbes

Ms. Lucas: Thank you. I really love this paper. That's for many reasons, but one is that I think there's a more general version of it, which really is an MV equals PY story. Because, when you think about the government providing cheap resources to the public, whether it comes from the monetary authority or the fiscal authority, it's still more money in people's pockets, and they don't have to be particularly rational for there to be price level effects; they could be hand-to-mouth consumers. I think some of your own work was along those lines. So, I just wanted to point out that there's a broader interpretation.

In this spirit of providing more money to the public, I also want to point out that, during the Great Recession and also this time around, fiscal policy wasn't completely well measured. My own work on credit policy and what that added to fiscal policy shows that on both rounds of stimulus, it pretty much doubled the amount of money that wound up in people's pockets. In the latest round, there was forbearance on student loans and mortgages, and there was the PPP (Paycheck Protection Program), and all of that was giving money to people with a pretty high marginal propensity to consume, which would actually support the idea. So, it would be interesting to incorporate credit policy on top of the fiscal policy.

Mr. Obstfeld: This is a very intriguing and ambitious paper. I just had two points, one specific and one more general, on the theory. I think it's hard to look empirically at fiscal regimes and identify sharp changes. One assertion in the paper is that (President Ronald) Reagan was a fiscal conservative and that when he came into office, we had a fiscal regime change. You can look at the experience several ways. One is that, in the 1980s, the U.S. debt-to-GDP (gross domestic product) ratio rose 50 percent by 20 percentage points of GDP. That doesn't look very conservative to me.

On the other hand, there was a Social Security reform, which, under the Greenspan Commission in (Alan)Greenspan's pre-central bank days, was a big deal but may have been motivated to some extent by the desire to hobble the welfare state alongside pure fiscal prudence.

Those of us who are older remember Marty Feldstein at the CEA (Council of Economic Advisers) railing against the Reagan deficits and the irresponsibility of that fiscal regime. So take all that for what it is.

On the fiscal theory of the price level, it always puzzles me. I wish someone could explain why we believe that government debt has to trade at par, why even governments with the independent ability to create money wouldn't default on debt. Debt default and inflation have very different distributional consequences. We've seen defaults by governments that have their own central banks, so how does one justify just taking the probability of default to be zero or just something exogenous to the fiscal process?

Mr. Frenkel: This was a really fascinating presentation and the message simplistically describes that monetary policy alone will not do the job. You need to have the appropriate fiscal policy. But I would like to dig a little bit into: What do we mean by the appropriate fiscal policy? And, for this, I would like to take you to the '80s.

In the '80s, there were three major hyperinflations in the world: Brazil, Argentina, Israel. All three adopted stabilization programs about the same time. They were called the heterodox programs. Brazil's Cruzado plan failed dramatically. Argentina's Tablita plan failed dramatically. Israel's Shekel plan succeeded dramatically.

And the question was: Where was the difference? The monetary side was about the same. The fiscal side, so to speak, was very different. But then, when you dig deeper, you see it is not mainly fiscal but mainly structural. The fiscal policies that were taken in Israel in that context were indeed cutting the budget dramatically. And today we would've said fiscal consolidation, but it was mainly a removal of distortions, removal of subsidies.

And thereby suddenly you had a positively sloped Phillips curve, output expanded, unemployment contracted, and inflation went down. So the lesson is, it brings me back to the remarks of Agustín (Carstens) yesterday, that really, without the appropriate structural context, we will not go all the way. And it's pretty important not to put it all under the title fiscal because it makes it too simple.

Mr. Krishnamurthy: Great paper and discussion. I wanted to pick up on two points that Ethan (Ilzetzki) brought up in his discussion, which I, too, think you could pursue further. The first point was, as he mentions, the Jiang et. al paper, which shows how to incorporate factors like liquidity premiums and convenience yields into the government budget constraint. They show that the convenience yields can have a quantitatively significant effect on the budget constraint. And since, to a large extent, you're doing a quantitative exercise, it's going to matter for how you interpret some of the variation of the data. These factors can also help answer the question that Ethan raised, which is: What's the difference between Greece and the U.S.?

The second point is that I, too, was puzzled by your result that during the COVID recession the probability of the fiscal regime went up, and the puzzling thing there, as Ethan points out, is that your mechanism really runs through investors in bond markets thinking about the future and changing their valuation of government debt. So, one should care very much about asset prices in this exercise.

But, in your observation equation for the estimation, you don't have asset prices such as inflation swaps or inflation options. Instead you're looking primarily at real variables and inferring how investors are looking at the future in their bond valuations.

So then the puzzling thing is, of course, it looks like your real data is telling you that investors should be very worried about increases in inflation expectations, for example, or rising bond yields. And yet the data says the opposite, and that's the picture that Ethan showed. Now, maybe one resolution to this puzzle regards tails. We also know in the data that inflation tail probabilities from options data have risen. So maybe a way of making all of this consistent is that median is still okay, but we have a fattening of the tail. And, in that case, you can translate your probabilities exactly to that fattening of the tail. I would be interested in understanding if that's what's happening in your model and the data.

Mr. Shin: This is a very interesting and provocative paper and a great discussion from Ethan. I agree that in the U.S. context the IMR, or "it's mostly real," approach is more plausible than the IMF, or "it's mostly fiscal," approach. But it's less obvious for emerging markets. We should ask what else has to be true in financial markets for the fiscal mechanism to be actually in action. In emerging market crises, an important financial variable is the exchange rate. An emerging market country that goes through a currency crisis sees a sharp depreciation even as it goes into a deep recession. Inflation goes together with a deep recession, and so this situation doesn't fit the IMR model. Fiscal sustainability shows up in the exchange rate.

When you're in a taxi, and the taxi driver tells you what the exchange rate is that morning, that's really saying how the exchange rate is serving as a very important coordination device. It's a galvanizing financial variable that does reset expectations. So I would suggest asking the question of what else has to be true in financial markets for this mechanism to be a persuasive account of what's going on.

Ms. Forbes: In particular, could you address this theme of: What should we look at if we want to take your model to practice?

Mr. Bianchi: Right, so I think a lot of questions revolve around asset surprises. So, as we know, to integrate macro models with asset pricing models is not the easiest thing. The term structure of interest rates is one of these challenges. But I agree that the evidence points

in the direction of an increase in the risk of moving to a high inflation regime.

So I think, in that sense, it's consistent. And notice that the model is exactly of that type. There are two scenarios, one in which we go back to 2 percent and then there is a less likely scenario in which we really get high inflation persistently. So in that sense it's consistent. Now, the best thing we could do is to simply integrate this into the model and in the estimation exercise. But, as I was saying, it's not a trivial exercise.

So, first of all, thanks also, Ethan, for the many great comments. It was a great discussion. So let me just select a couple of them. So the first one is we have this traditional Phillips curve mechanism. It's there. We have a plethora of shocks. We also have a parallel paper with Renato Faccini and Leonardo Melosi, in which we have an even more complicated model.

And this also goes back to the idea of having richer dynamics. So the idea of, for example, having hand-to-mouth workers that we have in that model. Even in that case, it's really hard to make sense of the spiking inflation through that single channel. And, again, I want to emphasize that these channels are in my model. It's not like there's only one channel, that's what we find.

The example of Japan always comes up. It's a good example in the sense that it's exactly what I was saying. In order to have fiscal inflation, you don't necessarily have to have high debt. You might almost argue that it is the other way around, that your capacity of accumulating debt has really to do with your ability of convincing the public that you will repay. And so that's what allows Japan to have a very large stock of debt.

There might be other things happening in Japan that we all know about, like demographics and so on, but I don't even want to go there. It's a very different situation. When we think about Europe and England and the U.K., it's harder to not see that they all implemented a massive fiscal stimulus.

The euro area suspended the fiscal compact. You might think that that's literally moving temporarily to a fiscally led policy mix. Now, you do that, and then you have populistic parties trying to win elections. You might think that maybe a little bit of fiscal inflation will arise there, too. And, finally, with respect to that, I would like to argue that there is always a large integration of the U.S. economy with the rest of the world.

There was this idea, also, of including credit channels. Absolutely, that's important. We can do it. As I was saying, we do it by building another model. Sometimes this question about Reagan comes up. So Reagan inherited a very good situation in which debt had been washed out by 20 years of high inflation. He had the debt-to-GDP ratio of 25 percent and he had a recession.

So that's why he could claim to be a fiscal conservative and at the same time run a primary deficit. But this, when you do the analysis, and we do that in another paper, when you look at the composition of this primary deficit, it's mostly the result of the recession. Later on, he starts running primary surpluses, and the accumulation of debt is simply the result of moving from a regime in which we inflate away debt to a regime in which we are committed to repay debt. That's why we are accumulating it.

And so, yes, absolutely. What makes debt sustainable? Frenkel's comment is a great comment. It's not just about increasing taxes. Putting into place policies that stimulate growth arguably is even more important, but we know how difficult it is. Thank you.

Mr. Ilzetzki: So I just wanted to thank Jacob Frenkel and Hyun Shin for bringing up emerging markets because my discussion was really primarily about high-income countries. And I do think that, in emerging markets, the fiscal channel is far more important in understanding inflation dynamics and hyperinflations in these countries. And Gita (Gopinath), in her comments yesterday, showed a nice chart of the difference between emerging markets and high-income countries in how inflation responds to fiscal excesses, to deficits. And so I think that distinction is very important, so thanks for bringing that up.

Mr. Clarida: I'm running out of adjectives, but yes it's an ambitious and provocative paper. I'm still working through the equation. So perhaps by next year's Jackson Hole, I'll finish that, but I have two quick questions right now. On the technical end, you have a model with two regime switches going on. And then, in addition, you've got a Bayesian estimation and modeling approach.

And so, perhaps revealing my ignorance about the Bayesian approach, how many of your results, which are really sharp, clean regime change results….

Mr. Bianchi: Right.

Mr. Clarida: So how much of that is being driven by your Bayesian priors or methodology? The answer could be little or all of it. The more intuitive question, and this is picking up on Maury Obstfeld's point, absolutely, by the end of the '80s, you had a number of fiscal packages that raised revenue and generated primary surpluses. So there was a lot of revenue raising that went on in the second part of the Reagan administration.

So, as Valerie (Ramey)'s charts showed, there eventually were primary surpluses later in the decade and in the 1990s. The question I have is that the Volcker disinflation happened by '82. So, in a forward-looking model, you have to have those folks in August of 1982 correctly anticipating all that. Maybe they did. But, anyway, so I think, if you look at the decade as a whole, yeah. But, if you look at the timing of the Volcker disinflation, I think Paul Volcker deserves some credit

Mr. Bianchi: Of course.

Ms. Gopinath: I feel compelled to give the IMF view. So, firstly, I think it is a really excellent, thought-provoking paper, but I share the skepticism that Ethan raised. So I think that the evidence that you would really need to say that this mechanism is working now is to actually show that, when you look at long-run inflation expectations, that's where you're actually seeing de-anchoring. Right?

So I showed evidence of the fact that, if you look at horizons of one year especially, you can see the distribution having shifted. That shift gets much weaker once you get toward three years, and it just dies once you get past that. Right? So that's one piece that, at this point, doesn't really speak to the fiscal view.

But, that said, I absolutely think that this is very important for developing countries. I won't name them, but there are emerging and developing economies for whom this particular mechanism, I think, plays an important role. I also showed this slide, and Ethan just mentioned that, where we look at the impact of surprise increases in debt on inflation expectations.

I was wondering if you've done that or is there fiscal theory literature of looking exactly at this particular channel, which is that when you have surprise increases in debt, do you start seeing inflation expectations, at the long-end, moving?

Ms. MacGuineas: I also wanted to thank you for a very timely and important paper. I wanted to dig into, as others did, what would create a credible fiscal framework and how one thinks about that. You said it isn't debt levels, and that's very helpful, but this got me thinking: Is it about the debt trajectory that we're on, or is it about the actions of the current fiscal lawmakers that you're seeing and what that's signaling and how it's related to the moment?

So, just for context on the trajectory, if we do nothing else, we're on track to…this is the U.S. We're on track to borrow $16 trillion over the decade. We'll eclipse the record debt to GDP, and it would take about $3.5 trillion just to stabilize the debt above where it is now; $7 trillion to stabilize it at 90 percent.

I don't know what the right level is, but these are very, very big numbers. And I think the trajectory issue is so important because, when there was the discussion around Blanchard's paper and g versus r , one of the things that I think got missed in that was that paper applied if you were at basically a balanced place, not counting interest, but so you were not having a high growth in your debt. And of course that didn't apply to the U.S., but that was missed.

But then I also think about: Is it more important what's going on right now in the federal government? And we just came from a moment where we signed into law the first legislation that would reduce the debt in 11 years. That seemed like a huge pivot that would've brought a lot of credibility into saying we're serious about tackling the debt. Then, however, the past two days we have watched more of that be wiped away with the forgiveness of student loans. That's $500 billion. That's more than the savings from the deficit reduction package.

And, if you look at the administration all told, since the American Rescue plan, there's been borrowing of about $2 trillion during a period of inflation. And I don't know if the effects of that on inflation matter as much, but, in your context, it matters a whole lot if it shifts the credibility, to thinking we're not taking this issue seriously. But so what I'm trying to figure out is how you balance the existing moments versus the trajectory.

Mr. Wunsch: One more observation. What you discussed in your paper, Francesco, might have some relevance for the discussions on fragmentation in Europe. But the point I wanted to make is mainly Belgium is a small country. You don't care about Belgium. We have a lot of ministers. And, when I talk to ministers, what they tell me is: As long as your rates are going to remain low, we are not going to do anything.

And so my question is whether we should care about that because there is some endogeneity in our conducting and support of monetary policy towards the fiscal stance. And we tend to say we need to abstract from that, but the more I talk with policy makers, the more I feel we need to think about it.

Another way to put it is I think we created a lot of expectations in the public by our reaction to the COVID crisis. And I still believe we did what needed to be done. And we had to be extremely supportive to facilitate the fiscal response to the COVID crisis. But now people in our democracies have been used to: If there is a problem, the government just needs to spend a lot of money solving the problem, and the central banks need to be behind the governments.

And so we have created a lot of expectations that make it very, very difficult for fiscal authorities to actually get the deficit under control. And, again, for what I know, they tell me: As long as your rates are going to be negative real, we're not going to do anything.

Mr. Bullard: I love the paper and the discussion. I want to suggest a simpler interpretation that might be compelling for this audience. If you know the… some of you know the paper by George Hall and Tom Sargent: Financing Three World Wars. And it views World War I, World War II, and then the pandemic. So the pandemic is viewed as a world war.

And what happens in wars is you have to borrow a lot of money on international markets without saying too much about future taxes. And you have the monetary authority all-in trying to help you fight the war. This is exactly what happened during the pandemic. Most wars are associated with inflation for the winners and the losers, and then what you need, in the spirit of Sergeant and Sergeant and Wallace, is you need to switch back to the pre-war regime.

And is that occurring? Well, Cook Political Report says we're going to have divided government very soon, and you have a very aggressive monetary authority. So that would seem, Francesco, to correspond to your soft-landing scenario. So I think there is some scope here to use this type of theory to understand the current situation

Mr. Bianchi: Yes, so let me start actually from the last one. I think it's very interesting. Absolutely, so as I was saying, this parallel paper, we take a different approach, and with Leonardo (Melosi) and Renato (Faccini), and we think, instead of thinking about a regime change, we think about parts of unfunded debt. So we might, in that paper, basically what we argue is that what happened is, yes, we spent a lot, and we consider these unfunded spending. We got inflation, and that is a better outlook because it predicts that we should go back to a 3 percent inflation, 4 percent inflation in the years ahead.

And this brings me to Gita's (Gopinath) point. What we saw in the data for Michigan expectations, we see an increase in expectations. So I feel like what we are disagreeing about here is the exact number that long-term inflation expectation should be. And those are a little

bit more specific. So if we had this in the model, probably we could do a better job in matching the exact value, but we saw an increase of around 1 percent pre- and post-pandemic.

I think it's consistent with what we are seeing. We're not saying that inflation will be permanently at 4 percent; we are saying that the current increase in inflation is 4 percent coming from fiscal side.

On the estimation, let me take the academic question. So this paper is based on previous work with Cosmin Ilut and Leonardo (Melosi) in which we actually estimate the regime sequence. And there we report uncertainty for the regime sequence. The regimes are very well identified, and it's not cooked in because the properties of inflation change dramatically from a fiscally-led regime to a monetary-led regime.

And I'm very happy to talk more about this, but inflation is persistent and volatile under the fiscally-led policy mix. Stable with spikes around the mean in the monetary-led policy mix.