Mr. Coeuré: Thank you for a great panel discussion. I have one question to Gita Gopinath and then one marginal comment, both of them short. The question to Gita is about the integrated framework. I’m a big fan of this framework. I like it. It’s very helpful. But do I understand it well that the country characteristics are exogenous in your framework? While you hinted at the end of your presentation that they might be partly endogenous, because again being entrenched by market dynamics and currency invoicing is a case in point, I guess. And so the question is, do you have anything to say in addition to the framework, maybe it’s in addition to the framework, on how to improve country characteristics to move closer to the first best. I’m not saying here that everything is structural. Everything is about structural reforms, which is kind of a European disease for intellectual laziness sometimes. But I’m saying, in complement to your framework, if you had a magic wand, and if you could change/improve the country characteristics to move toward the first best, what would be your priority?

And the marginal comment is related actually to the whole of the conference, because a lot of the discussion here was about the U.S. dollar being the dominant currency. It’s striking to see that 20 years ago, the discussion was about the dollar being displaced by the euro.
Then it was about the dollar being displaced by the renminbi. Now, it’s about the dollar being displaced by Libra, and it goes on and on, but the macro discussion is the same. It seems to me that we know very little about how the international monetary system would work in a world with more than one dominant currency. That was a little bit in the discussion between Arvind Krishnamurthy and Olli Rehn at the end of the last session. And we know very little about the kind of substitution we would see, and portfolio shifts we would see between these two currencies, and this has huge implications in terms of financial stability. So, my plea to the community is please provide us with a fresher thought about that.

**Mr. Eichengreen:** I asked for the microphone to amplify something Philip Lowe said, but I want to respond to Benoît Coeuré as well. Philip’s point is really important. Central banks have fallen into a trap of communicating with financial markets and judging the adequacy of their communication in terms of financial market reactions, but they have a larger constituency, and they need to frame a narrative that succeeds in communicating with that larger constituency. Other political actors have discovered recently the power of narrative, as opposed to data, as a way of communicating and advancing their agendas. (Can you say “Twitter”?) The literature in economics and economic history on analytical narratives provides some guidance about how you meld data with stories as a way of enhancing communication.

For Benoît, there is a considerable body of evidence on multipolar systems. In my view, an accurate characterization of the last four decades prior to 1913 is as a multipolar system. Similarly so for the interwar period. One of these worked smoothly with a minimum of erratic swings between reserve currencies of the sort that Arvind is worrying about, while the other one worked terribly; both experiences were reflective of the stability of the underlying policies.

**Mr. Henry:** So, two questions. First question for Gita Gopinath. As you think about your new model framework and policy framework, have you thought about it in the context of capital flows? It’s a point that’s been made certainly the last two decades by people from Maury Obstfeld to Ken Rogoff about the distinction between debt
and equity in capital flows, and the ways in which the international system is biased toward flows of debt, and how this has been kind of a recurrent theme in almost every emerging market crisis. It’s really debt that causes the issue, not equity. So the question is, what have you thought about that?

Question for Philip Lowe. Just building on what Barry Eichengreen said, I completely agree that there are heightened expectations and central bankers really face the challenge of tools that are not up to those expectations given the state of the world that we’re in. So my question is, given this framework of constrained discretion, what is your view about how constrained central bankers should be at the moment in, frankly, using their discretion to communicate to the broader public as Barry’s pointing out? The limitations frankly of the tools that they have at hand? And frankly, the inadequacy of our elected leaders in actually passing structural reforms and other things which really are better suited to dealing with these issues. I point to one example I thought was pretty artfully done in October 2016. Stan Fischer gave a speech at the Economic Club of New York, which he talked about interest rates, but talked almost exclusively about the supply-side factors that affect interest rates. He was a little more subtle in October 2016 than he was yesterday in pointing out the deficiencies of leadership. But I wonder, what is your view on that?

And then finally, the point about stories. I think Barry is absolutely right. Thinking about broader constituencies is fundamental. I’ll give a very-small-economy example that I know because it’s where I’m from. Jamaica has really shifted the dynamic recently on storytelling, and realized that after basically 40 years of dealing with high inflation and an unstable economy, they had to take it upon themselves, the Bank of Jamaica, to really try to shift the political equilibrium by communicating directly with, not people who run banks, but people who run fruit stands and are regular sort of members of the citizenry in order to change the political dynamic, basically the demand for low and stable inflation using of course reggae music. So, my question is again, in the spirit of constrained discretion, to what extent are advanced economy central banks willing to be a little more humble and sort of reach out to this broader constituencies that Barry underscored?
**Ms. Tenreyro:** Let me first say that this is an amazing panel. I would like to reinforce something that Philip said at the end and relates to Gita’s remarks. The lack of expenditure switching with dollar invoicing happens in the simple new Keynesian model, but not in commodity-exporting economies, from Australia to Canada to Argentina. The appreciations do increase profitability, and incumbent exporters do increase production. It also allows producers at the margin to enter the export market. So, they have a boosting effect on the economy. Dollar invoicing does not imply fixed prices. In the data, there is a fundamental identification problem because the appreciations increase exports, but also lower exports also tend to lead to depreciations through monetary policy loosening or through markets’ expectations of it loosening. So it’s very hard to identify this relation in practice, and we shouldn’t be quick to read too much from correlations or simple reiterations.

And then going back to communications, the other point I would like to advertise is what the Bank of England is doing. We have three layers of communications. We don’t go as far as Jamaica, but there is one layer that is very accessible to non-economists, and that’s a step toward trying to reach a broader audience.

**Mr. Blinder:** I thought it was a great panel. It seems like I’ve been coming to these symposia since Jim Coulter came to Jackson Hole; and this was a great panel. I thought I’d be the only one to pick up on Philip’s very, very important remark about communication with the public. So I’ll be very brief, since about four people have already been there. If you go back to the early days of the Jackson Hole conference, central bankers not only were bad at communicating with markets, they hardly ever did it. There was a sentiment then that you should “burn their fingers” or wrong foot them and so on. We’ve come a long, long way since then—though not only because of the Jackson Hole conference. Central bankers are now pretty good at communicating with markets. With the public, it would be a great exaggeration to say we’re in the infancy of doing that. With a few exceptions, there’s been almost nothing. And it’s very hard to do. You don’t communicate with markets and with the public in the same way. The things that central bankers say to markets is economics
talk, and market people understand that. To communicate with others, which becomes extremely important in times of crisis, when the footprint of the central bank is huge, or in times when central bank independence is under threat from the political side, then communicating with the broad public becomes fantastically important, probably more important than communicating with the markets. And we don’t know how to do it. I think your emphasis on stories is a potentially very important step forward. So, I really want to call attention to that and commend you for it.

Mr. Gourinchas: I thought this was a terrific panel and I have just two quick questions, one to Gita and one to Philip. To Gita, I think the integrated policy framework is really a great initiative. But I want to push a little bit on what the ultimate objective is with something like this, and to do this, I’m going to borrow from Valerie Ramey’s discussion yesterday of Athanasios Orphanides’ paper. It’s clear that the integrated policy framework is like one of those rectangular boxes that we can use where the experts can sort of come in. But then the question is, how does it fit with the nebulous cloud of some desk expertise and things like that when we want to fine tune the recommendations that we make to countries’ governments or policymakers? I think there is a question there in a sense about the granularity of the exercise. Is it just about trying to develop some sort of topology about broad strokes on what types of instruments and policies should be combined in response to particular types of shocks, or is it really designed to sort of fine tune it in the way that could be giving very specific answers? My sense is that it’s more in sort of the first approach than the latter, but I’m sort of curious as to your views and how you view that?

The reason I bring this up is, if we think about a lot of these new instruments that you’re bringing to the table, and of course there have been a lot of discussions about them, whether it’s foreign exchange intervention or prudential policies. We still lack what we have when we’re looking at interest rate policy from monetary authorities, which is some sort of framework like inflation targeting or policy rules. And I think one area where we want to develop as well our expertise is understanding well what kind of rule, what kind of
instrument targeting, etc. we could try to provide in a macroprudential or FX intervention domains just like we have them for, or at least we understand them very well in the context of interest rate policy. I’m curious about your views on this.

To Philip, I want to rebound on something that a number of people have brought up, but with a slightly different twist. You mentioned that the Reserve Bank of Australia has three pillars instead of two, and the third pillar is prosperity, which is different from full employment. I interpret this as meaning that it’s something about distribution and not just levels of output.

That brings me to two comments. One is that do you think you live in a world, or at least in Australia, the way you describe the implementation of monetary policy was reminiscent of the divine coincidence as well, that you let the exchange rate float, you have an inflation targeting, and somehow you achieve low and stable inflation, and an economy that’s been astonishingly growing for 28 years. So, that sounds very close to divine coincidence in the kind of models we have where you just implement monetary policy and you achieve two objectives.

To achieve the prosperity, you need to achieve sort of a “double divine” coincidence. So, I wanted your views about whether you think this is achieved, how that gets integrated into your policy framework because that’s a very relevant and important question going forward.

Mr. Selgin: My question is for Gita also. Thank you for your paper, first of all. I thought it was very interesting. It’s a small technical question, but I ask it in the interest of seeking out possible silver linings, so maybe it has some merit for that reason. You use a sticky price framework for your analysis, and it occurred to me that it might be interesting to know what difference it makes to look at the sticky wage version of the model. The reason I suggest that is that it seems that some of the troublesome trade-offs you point to, that add to the challenges of monetary policy, might not be so troublesome if the world were one of sticky wages. I think in particular of the productivity shock example where it seems to me, if I’ve got my intuition right, that you wouldn’t have the trade-off that you mentioned. So I’m just
curious whether you’ve looked at that alternative or not, and whether you have any thoughts about it.

**Mr. Frenkel:** I will start my comment with the remark of Philip Lowe, according to which: “Australia has prospered with flexible exchange rates and open capital account.” Those who wish to depart from a flexible exchange rate regime with an open capital account, will need to address the question as to why would they wish to give up the benefits that are brought about by such a system, as exemplified by the Australian example. In fact, there are many more examples like Australia that demonstrate the benefits that countries obtain by adopting a flexible exchange rate regime with an open capital account. The key policy challenge for countries that are still not having a flexible exchange rate regime and open capital account is how to develop the institutional and market mechanisms that will be conducive to a well-functioning foreign exchange market and a resilient capital market. Once these are developed, countries will be able to adopt such regimes without having the “fear of floating,” and without having the “fear of capital movements.” With this in mind, I am very skeptical about the wisdom of imposing capital controls. Those who believe that they can prevent “bad capital flows,” while still enjoying “good capital flows,” will realize quickly the futility of such a distinction. This is analogous to attempting to design a diet that includes the “good cholesterol” while avoiding the “bad cholesterol.” Such a refined theoretical distinction is non-operational. The Australian experience demonstrates that the benefits from capital flows are immense and that the temptation to impose capital controls should be resistant through policies that improve the resilience of capital markets. Such policies include structural measures that remove distortions and increase the flexibility of the economic system. This will secure the long-term benefits from capital movements.

**Mr. Ingves:** Reflection on Philip’s comments on communication, and that’s sort of thinking about what I actually do. I’m a shaman; I’m a weatherman; I’m a showman; and I’m an economist. And out of that, if you summarize the whole thing, I’m expected to be, and I am, a storyteller. I tell stories about the future. And if I’m successful in my storytelling, I can do it in such a way that people say, “Hmm,
that’s reasonable,” and that’s because we human beings just simply love stories about the future. And that’s part of my job. Now, doing that, it’s extremely important to understand your audience, and it’s extremely important to understand that you have audiences, using the plural. That essentially means that you talk to professors in Latin, and you talk to farmers in such a way that the farmers can understand what you are saying. And if you do that, then people tend to think that that’s a reasonable thing that’s going on. But in this day and age, it takes us very, very far from the written word because we have learned the hard way that people don’t read stuff anymore. They click. And that means that it brings us as central bankers into the show business, and it brings us into the show business in a very odd way because we are sort of trained to give lectures, talk for 45 minutes, and things like that. But you’d better figure out how to say things in 30 seconds. And that’s what this business is all about nowadays. So, that was my first remark.

The other one with reference to what was talked about yesterday in terms of rules and how to communicate, it’s pretty hard to combine very precise rules with monetary policy committees. Because what a monetary policy committee does is basically bake a monetary policy cake once every two months or whenever you need. And in order to avoid people dissenting constantly, in order to just produce a decision that produces a story. So that you can tell your stories, you have to have some leeway when you do that because if you have too much precision, you will never really get to a decision because people always disagree on many different things.

Mr. Fischer: How credible you are depends on whether you know what’s going to happen. I was probably foolish to think that I knew how we were going to deal with the Great Recession when Lehman Brothers failed. But I did think I knew how we were going to do it, and I went on all the TV channels and I said, “This is a problem we know how to handle.” And I said it to everybody. Since I believed it, it was easy to convince people. When you don’t know, it’s a heck of a lot harder and I don’t know how you succeed except by succeeding, which is what the Australian approach has been. But it takes some
luck as well to be successful when you’re uncertain and when you’re justifiably uncertain.

**Mr. Yaron:** Part of what I was trying to say, I get the 30-second communication and the differentially of who you were talking to. Part of what I was saying about the financial markets had to do with that, that lots of people are interpreting you, but particular financial markets. So I think communication is important. That seems to be the main comment that is coming out of these panels.

I’ll just reiterate what I said about the divergence issue, which for us is a small open economy. I think it’s an ongoing challenging thing to manage to be between the big blocks, and it seems like even if we’re slightly on a less divergent path, there’s still enough gaps there that you’ve got to navigate the ship the right way.

**Mr. Lowe:** I’m really pleased to see the discussion on communication because I often get frustrated with the heavy emphasis on the models, of kind of the equations and dealing with financial markets. I’m always looking for ways of being able to tell stories, a bit like Stefan Ingves, and it’s a work in progress and I’m not really sure what the best way of doing that is.

Somebody asked about when we’re communicating, should we communicate the limitations of monetary policy and the options for using other levers. I think the answer is going to be very country specific. I’m very careful not to tell the government what to do. They don’t tell me what to do either. So there’s kind of a delicate balancing act. But at least, in our system, I felt there has been a role for me to set out the options, not to say which options should be taken. I think people can often infer what I think is the right option. But I think the central bank, particularly where it has credibility, can set out options for the community and hopefully that leads to a broader discussion of those options, and over time that shapes the political debate. But I do think we have to be careful not to tell other people what to do.

Another issue that was raised was the Australian success and the role of the prosperity mandate in the central bank. I want to make it very clear that I’m not saying a monetary policy is what’s driven our
economic success. It’s just one of the many factors. We’ve had a lot of luck, we’ve got good fundamentals, we’ve got great natural resources, we’ve got a rapidly growing population, and we’ve got good institutions, and we had a flexible floating exchange rate. So, monetary policy is just one element of that.

The prosperity element of our objective function, I want to make it clear that that’s not a bad distribution. It’s really about the frame of reference. One way of discussing our interest rate decisions, we often ask, is this going to serve the collective welfare of the people of Australia? That’s our starting frame of reference. And I’ll give you an example. In 2017, we had inflation that was low, it was below our target, and we decided not to cut interest rates. We knew it was going to stay below our target for quite some time, and the reason we did that, in our discussions on our board, we said would cutting interest rates just to get inflation up a bit more quickly, even though the labor market is quite strong, would that been the collective interest of the country? Because we could get a bit more inflation, but it would come with more borrowing and higher asset prices. Is that in our collective interest? And at the time, my board made the judgment that it was not in our collective interest. And we were able to do that because we had this overriding objective of serving the welfare of the people of the country.

Last point I want to make is to the remark that Jacob Frenkel made. In Australia, we tried every single exchange rate regime. We’ve had affixed to the U.S. dollar, affixed to the pound, and affixed to the trade weight index, a moving kind of basket. I mean, we’ve done everything. And we moved to a floating exchange rate in the early 1980s and it was the best thing we’ve done. When we first moved to a floating exchange rate, there was a lot of handwringing that this just wouldn’t work for us because we didn’t have the capital markets, people couldn’t hedge risk, and so there was a lot of managing with the exchange rate in the early stage, and a lot of angst. But what we found was that by letting the exchange rate move, the markets actually develop. You can have a mindset that says we can’t let the exchange rate move because the markets aren’t there. But our experience is let the exchange rate move and the markets quickly develop as long as
the institutions and the policy framework’s good. Within five years we developed deep and liquid hedging markets that allowed us to be successful with a highly volatile exchange rate.

**Ms. Gopinath:** Thank you for all the great questions. Let me just quickly go over them. For Benoît’s question whether we are assuming that country characteristics are exogenous, the answer is yes. Now, the way we think about it is that, of course, some country characteristics are probably not going to change very quickly. Whether you’re a small open economy or not is probably not something that’s very malleable. Whether you’re a commodity producer or not, that’s not very malleable. Whether you mostly trade in your international markets in using the dollar, that is not going to change any time soon for many, many countries. Some of this is good to assume as being for the horizons we’re thinking of as being exogenous. But then of course, yes, there are other parts of it such as the amount of currency mismatch you take on, and how deep your effects markets are. These are going to be a function of the policies. So, we plan to get into these pieces as we continue to work on it.

To the question of how the international monetary system, the dollar dominance, affects policymaking, I think one of what we’re doing here is to bring those pieces in. And to the question of, how do we change that? Should we change that? There’s a lot more research that needs to be done, but I feel like I’ve contributed some with this work on what gives rise to dominant currencies.

Peter Henry’s question again is quite related to this. It’s true that you now see countries borrowing mostly in form of debt. Your prescriptions are based on the fact that they borrow more. But what if you were to encourage them, or someone get them to move to equity? Then maybe the policy prescriptions would change. Again, that’s about endogeneity of the characteristics. On Silvana Tenreyro’s point, IPF tells you that for a country that’s a commodity exporter with deep foreign exchange markets with very little mismatch, you do want to have flexible exchange rates. Mundell-Fleming works beautifully. So the policies work exactly right.
So, it’s not the case that there’s no expenditure switching with dominant currency pricing. There is expenditure switching. It’s just more muted. Secondly, by definition the dominant currency paradigm (DCP) does not apply to commodity prices because those are flexible prices. So by construction, that’s a separate—it’s a flexible price story. So, none of these concerns that come with DCP apply there.

For a question that came up about sticky wages and sticky prices, I’d like to think about this more deeply. If the only issue is you have sticky wages in your economy and prices are flexible, then you do have what looks closer to Mundell-Fleming. It looks more like a producer currency price. But again, for most countries in the world, you have sticky wages, but when they sell into international markets and you look at non-commodity exports, they tend to be priced in dollars or in euros and those are not very flexible.

So, now to conclude with Pierre-Olivier Gournichas’ question, which I think is really important, which is what exactly are we trying to get to with this? And here I should be careful because there are many views in the building. But let me just tell you what some of us think there. The idea is closer to broad strokes at this point, which is to say that the assumptions we make to derive inflation targeting, flexible exchange rates, do not hold in the data for many countries. For some, they do; for some, they don’t. And we need to improve our toolkits to think of how we then adjust what kinds of policies we use. That’s one. And secondly, it is already the case that policymakers use these four instruments and we obviously need a framework that thinks about how these instruments work, what imperfections do they address, and more importantly, how do they interact? The idea is to provide such a framework to kind of start a discussion to have when you go to a country. It is kind of a talking set of points that you have, and then of course, discussions matter.

But again, to Jacob’s point more generally about it, just to be very clear, the policy of the integrated policy framework is not to say that anything can be rationalized. But it is to say that country characteristics matter. Some of them are durable, some are not. So, you might want to intervene in an episodic way for reasons that can be well
explained, but clearly you also do want to work toward the goal of having better financial markets, deeper financial markets, and so on.