Ms. Forbes: I’m going to ask one question to link the comments here with the theme of the conference about constraints. So first, let me start with my question, to try to link each of your experiences with the theme of the conference on constraints.

So what is striking is, during COVID, central banks around the world responded aggressively with a range of tools. Most central banks provided liquidity somehow, most provided forward guidance. But what is striking is, on this panel, is then the other tools which you chose were quite different.

Let’s take the ECB (European Central Bank) and Francois (Villeroy De Galhau), I’ll merge you in with the ECB. The ECB did not lower interest rates any further. Granted, you are already starting pretty low, but you did not do the conventional first response, lowering interest rates. Instead, you relied heavily on asset purchase programs, including a new program.

The SNB (Swiss National Bank) also did not lower interest rates any further, again, starting from a low level, but you also did not adopt asset purchase programs, one of the few advanced economies that didn’t. Instead, you relied much more heavily on FX (foreign exchange) intervention.
And then, the Bank of Korea followed a more traditional approach of reducing interest rates, but then did not adopt QE (quantitative easing), as the other panelists did, even though many emerging markets, advanced countries did. And you are one of the few countries to use CFMs (capital flow management measures) as well as FX intervention.

So, I was wondering if each of you could quickly talk about what the constraints were that ruled out some of the policies that other countries followed. And some of it’s obvious, you were starting from very low interest rates in some cases. But does those constraints you experienced during COVID make you think differently about what comes next?

For example, for the ECB and SNB, does it make you put more priority on getting rates up as soon as possible, so you’ll have that tool in the future? For those of you who did not use asset purchases, why not? Does that make you think differently about market functioning, market structure regulation, so you could have that powerful tool in the future?

Ms. Schnabel: Thank you very much. Of course, that’s a bit unfair towards François because we are probably going to say very similar things, but I am sure he will complement me nicely.

You already mentioned the effective lower bound on interest rates, which certainly played a role, although at that time, we stressed that we did not perceive us already having reached the lower bound. In fact, it was a much more holistic assessment, thinking about which were the most effective tools in this very special situation.

One important instrument was our longer-term refinancing operations, the TLTROs (targeted longer-term refinancing operations), which played a crucial role, especially in a bank-based economy like the euro area. The idea was that banks would get a much more favorable rate if they maintained their lending at the pre-pandemic level. These refinancing operations were a very important part of our policy response.

Regarding asset purchases, we introduced a new program, the PEPP (Pandemic Emergency Purchase Program). This was not just another purchase program, but it had an important feature, which we believe was very effective, that is its flexibility. It allowed us to
allocate our purchases flexibly across time, across jurisdictions and across asset classes, because we do not only buy sovereign bonds but also corporate bonds.

This flexibility was important in order to deal with an issue that is specific to our currency area, which is the transmission of monetary policy throughout the entire euro area. And there, in particular, the possibility to allocate purchases flexibly across different jurisdictions proved very powerful. An important lesson is that this flexibility had to be employed only over a very short period of time at the peak of the crisis. Markets quickly understood that this flexibility was there. Thereafter, we did no longer have to use it, as the mere existence of flexibility was sufficient.

So, I would say, our specific policy response was somewhat different from others because we are in a bank-based economy and because we’re a currency union with some heterogeneity across member states.

Ms. Forbes: I’m going to adjust my forward guidance briefly, just to show central bankers are flexible.

Mr. Villeroy de Galhau: About the past. I happen to be the old chap at this table because Isabel (Schnabel) has been member of the governing council for three years and I have been for seven years. Having said that, Isabel, I have nothing to add to what you said about the past. The main difference is that we are bank-based system. But let me add a couple of remarks for the future.

First, I would not conclude from past differences in instruments that there will be a significantly different policy or combination, at least in the future. And second, I alluded to it in my speech, there are differences between the nature of inflation between the U.S. and the euro area. I don’t conclude from this differences that we shouldn’t act, I was clear enough on that, but let me stress two of this differences

The figures of headline inflation are about the same at present but first, the demand part of inflation is more important in the U.S. And second, the energy component of inflation is much more important in the euro area. We, Europeans, were a bit astonished that, yesterday morning, very few alluded to the war in Ukraine as an economic
problem in the U.S. For us, it’s a very important economic problem. So, it can lead to a somewhat different reaction in monetary policy.

**Mr. Rhee:** Yeah. Actually, the Korea case may not be a general case for emerging markets. Because of the relatively successful containment after the pandemic started in Korea, our output didn’t decline much. And there was no substantial period of lockdowns in Korea either. That may explain why we didn’t see many structural changes in the labor market that many speakers discussed yesterday. We definitely relied on low interest rate policy and protected the output. But we didn’t use, at that time, capital flow management measures or FX intervention very much. These were possible due to more successful containment.

On the other hand, the low interest rate environment increased asset prices quite significantly. And the Bank of Korea started to increase the interest rate to address this asset price increase, rather than inflation. Thanks to this early move, we could contain inflation pressures relatively better in the early stage.

If I talk about the recent inflation dynamics in Korea, our inflation rate is 6.3 percent at this moment. Still quite high, historically. There are several contributing factors.

One is energy price hikes. The second is FX depreciation. We do not have solvency or liquidity problems, but significant FX depreciation, together with other major currencies, added to our inflation pressure.

And two major banks in the region, China and Japan, are the only two major banks who maintain loose monetary policy and their FX depreciations make our monetary policy and inflation dynamics difficult. Geopolitical tension, which has an implication for the future of global supply chain, together with the recent slowdown of China, increases market sensitivities. In sum, if you talk about the constraint on our monetary policy, it’s mostly from outside, rather than inside.

**Mr. Jordan:** After the onset of the coronavirus pandemic in 2020, there was strong pressure on the Swiss franc to appreciate. Our goal was to keep monetary and financial conditions unchanged. More expansionary conditions would of course have been desirable, but
this was simply unrealistic. We had to intervene a lot in the foreign exchange market just to stabilize the exchange rate.

In order to bridge firms’ liquidity shortfalls, we introduced a novel instrument in the early months of the pandemic which provided bank loans to SMEs. This program combined measures by the federal government, the Swiss National Bank and the private sector. Banks provided loans to all interested SMEs at zero interest. The federal government took on all the credit risk. And the Swiss National Bank provided banks with liquidity at minus 75 basis points, the then prevailing policy rate. This instrument was very powerful. Within a few weeks, 20 percent of Swiss companies had obtained such a loan.

Looking to the future, I believe that this joint program should be what it was, namely an exception. As a rule, monetary policy should be set independently of fiscal policy. The other tool we used in the pandemic, foreign exchange interventions, will by contrast remain an important instrument, alongside the policy rate. For the future, one has to bear in mind that we can intervene in two directions. So, we could not only buy foreign currency but also sell it, depending on the exact situation.

Mr. De Gregorio: I have just a one question for the panel, especially for those coming from small open economies. Because, one thing that has been at the core in many countries experiencing high inflation, especially in emerging markets, is the weakening of their currencies. In some cases the depreciation has been quite sharp.

In addition, as Gita (Gopinath) mentioned, that the pass-through from exchange rates to inflation is higher in the emerging markets. So, I would like to know if you have some views on exchange rate adjustment, how this should proceed, and what are the policy implications, especially in high inflation countries. For example, there are some policy recommendations, which I do not share, to fight inflation by artificially strengthening the currency via exchange rate intervention or capital controls with the purpose of reducing inflation. So, I would like to know if you have some views on the if you have some views on the use of exchange rate policies to control inflation.
Mr. Syverson. My question is raised by something Isabel talked about. It’s also related to Agustín’s (Carstens) lunch comments yesterday, and that is the turning of the supply-side tailwinds to a headwind, and whether the buffer is being lost there. And to take the specific example of, whatever you want to call it, de-globalization, friend-shoring, etc., is that just exacerbating the problem? Or might we think of that as buying insurance against future supply shocks?

And so, maybe we’re giving up some mean productivity growth for the sake of smaller variance of supply shocks later, and therefore, maybe might even be stabilizing. And I’m asking, not implying I know the answer to that. I’m truly curious what everyone thinks.

Ms. Guardado: I wanted just to circle back to fiscal constraints and that, and Brazil was cited, very much whenever fiscal dominance arises. But although very theoretically enticing, this fiscal dominance issue comes up yearly in my country because we have so many doubts regarding the fiscal framework. But it usually is accompanied by two narratives, either that the central bank will not raise rates enough because we want to help the government inflate the debt away, or we won’t raise rates enough because we will become afraid of fiscal dominance and that will lead to higher inflation.

So the end game here is that the central bank’s resolve is being tested by this kind of narratives. In the end, when we end up delivering on our hikes and tightening cycles, what we do observe is that there is this, when we are adamant about our mandates and our efforts to bring inflation down, what we do observe is that markets end up expecting this higher rate period to be not long, a very prolonged period, and inflation to come down. And when they do expect the central bank to do its job, and bring inflation down, these fiscal dominance narratives just go away.

So it’s kind of amazing to see this happen every year. And we come back to some of Isabel’s comments, and that’s where I want to wrap up. It’s not a question, more like some reflections. The central bank, being very credible and being very consistent in saying it will bring inflation down especially in this scenario of very large uncertainties, is very helpful, even in the face of very high fiscal constraints. So, we
are the one game in town and we have to be very forceful with our efforts in our mandates.

**Mr. Gorodnichenko:** I was wondering if this panel can comment on the likelihood of reigning in inflation without generating a recession?

**Mr. Nagel:** I would like to refer to a quote from Francois. I understood that he referred to the Blanchard quote from 2006. That was just years before the financial crisis in a very convenient environment.

I'm not sure if this quote works in these days. He said monetary policy must be, or should be, closer to art. I think monetary policy needs to be closer to reality. And from time to time, I feel, following the discussion yesterday and these days, that we make things too complicated. The narrative and the reality check we are getting through is rather obvious. The story is pretty clear: Inflation is much too high.

The answer in a situation like this seems to be obvious. Given this high inflation numbers, we as central banks have to raise rates. So the answer is not complicated for me. Complicated is the question when it is the best timing to stop increasing rates. And I have to say, I do not really know. It's much too early to think about where the terminal rate is. So, my point is that we shouldn't overdo the terminal rate discussion, but we must act now. That is more a comment than a question. Thank you very much.

**Mr. Kuroda:** Japanese inflation, as well as monetary policy have been mentioned during this session, as well as the former session. So let me explain the Japanese situation like this. When I was Vice Minister of Finance from 1999 through 2003, Japan’s fiscal government debt, the GDP (gross domestic product) ratio was about 100 percent. Since then, the ratio continued to rise and currently it’s 250 percent of GDP, the largest among G7 countries. And yet, we had deflation from 1998 through 2013, continued deflation. So fiscal dominance, or fiscal theory of inflation, apparently does not apply to Japan.
Then in 2013, we introduced substantial monetary easing, so-called QQE, qualitative and quantitative monetary easing, and expanded monetary base and the money supply tremendously. But inflation rate continue to be around 1 percent, never reaching 2 percent target. So, monetary theory of inflation also does not apply to Japan.

Now, somewhat miraculously, now we have 2.4 percent inflation. But almost wholly caused by the international commodity price hike, energy and food. So we expect that, by the end of this year, maybe inflation rate may approach toward 3 percent. But next year, inflation rate, again, this rate toward 1.5 percent.

So, we have no choice other than continued monetary easing until wages and prices rise in a stable and sustainable manner.

**Ms. Forbes:** So, we’ll turn back to our panel. Could you each just pick one point you’d like to respond to. One final point to make.

**Mr. Villeroy de Galhau:** We have small risk of fiscal dominance in the euro area for various institutional reasons, but we are better protected than others. On recession: No risk for this year. We had good news on Q2. For next year, question mark, and we will publish our forecast on September the 9th.

I will conclude with Joachim’s remarks. We all agree that be it art or science, it’s not time for inaction. In both cases, it’s action. The only point I want to make that, in both cases, we need judgment and discretion. What we learned for sure, with forward guidance and in the last year, is that rules have a limit. This is where the debate becomes interesting, especially in the Governing Council.

**Mr. Jordan:** Well, José, you asked about capital controls as an instrument. In the Swiss case, the bar to introduce such controls would be very high. Moreover, capital controls are not something the central bank could introduce on its own. It would need a legislative act for that. Another important consideration is that Switzerland is an international financial center. For us, it would not be attractive to introduce capital controls. That is why they should not be part of our standard toolbox.
**Mr. Rhee:** Governor Kuroda has been a respected mentor and longtime advisor to me, but he’s recently not helping me at all in the short term, as it is in the meantime. In the short term, Yen depreciation give me a lot of headache to me. And then also, as he mentioned, our politicians know Japan case very well, and keep on saying that why you are not using more fiscal expenditures and why using more expenditure balance sheet of central bank. And why not worry about debt-to-GDP ratio, go up to from seven, six, 50 now to 200. So, the main reason why I wrote this paper, and then have this in today’s remark that this unconventional policy is not for Korea, is actually to address that issue.

**Ms. Schnabel:** So, actually also would like to respond to Yuri’s question. So, I mean, it’s pretty clear that the war is leading to substantial slowing down of the euro area economy, and that the recession risk has gone up. Whether there will be a recession of all, I don’t know, in parts of the euro area probably will be a recession. So, what does that then mean for us?

I mean, remember that the ECB has a single mandate, it’s just price stability, so we do not have an employment mandate, for example. So I would argue, that even if we enter a recession, we have basically little choice than to continue our normalization path. And I would say that, I mean, if there were the anchoring of inflation expectations, the effect on the economy would be even worse.

And therefore, I would say, that we have actually little choice, even though this situation, obviously, for us is an extremely difficult one