Opening Remarks: New York Fed and NYU Summer Climate Finance Conference Kartik Athreya, Director of Research and Head of the Research and Statistics Group, Federal Reserve Bank of New York May 31, 2024

Good morning,

In these remarks, I'm going to talk about what researchers are learning about the economic consequences of changes in climate, of the ability of financial markets to deal with it, and of policies aimed at altering status-quo paths. I'll start by quoting from a set of <u>remarks</u> I made on this topic four years ago. "In asking about the odds of serious action, let me be very clear that I am not a central banker veering out of his lane. Instead, I am one trying to understand what path to expect. Indeed, as a central banker, I take as parametric the judgments of the political system and carry a sense of responsibility for understanding as clearly as I can the risks we face—very much including climate change—and how they matter for our lines of business: monetary policy, community development, and the safety of the financial and payments systems."

In that event, which my then-colleague Toan Phan had organized with people this audience knows, we had a strong docket of great people presenting top-shelf work on climate and its connection to economic performance.

And in those remarks, I discussed where I felt we were headed. I made a set of four "positive political economy" conjectures.

- Addressing climate change is arguably the most challenging public economics, and maybe macroeconomics, question currently facing the world.
- The negative effects of climate change are most likely to be felt by already poor and vulnerable populations.
- Communicating the scientific consensus on the costs and benefits of climate action to the broadest public is essential, even if only to manage unabated climate change.
- Part of economists' role is to identify changes in incentives that would help preserve the climate commons without imposing additional aggregate costs.

Fast forward to today's event. This group of researchers has made real progress on several fronts since that event.

It's trivial today to point to a large change in the world around—in terms of species loss, mass migrations of fauna, of the high confidence we now place in missing earlier goals on global temperature. Leaders in your world, including <u>Gasparini and Tufano</u>, for example, have helpfully assembled some of the evidence.¹ Of course, while the evolution of physical environs is important and sobering, as economists, we want to attach *valuations* to allocations. After all, if all the changes meant was for extremely incidental kinds of things getting degraded, then maybe we could feel less urgency. But alas, that seems not to be the case. A few weeks ago, I was struck

¹ 23-057_28ebdda0-225c-4bff-8fc4-733f4e1a11c7.pdf (hbs.edu)

to the point of spamming all my colleagues with <u>Adrien Bilal's paper with Diego Kaenzig</u>. It's an advance in many ways, including in its use of newer and better data. It delivers a near-one-order-of-magnitude upward revision in the cost of CO2. This is just striking. Divide it by three if you want, and you still get a doubling of the costs relative to previous estimates. Their view of the BAU path is clear: we will be poorer than otherwise, and substantially so.

Another question for economists is what scientists and *markets* think about climate. In their 2021 JFE paper, <u>Stroebel and Wurgler</u> suggest that academics and regulators think markets are not getting it quite right and are underestimating risks. This leads me to wonder if various implicit public-sector supports are being priced in, supports that we are all on the hook for.

Economists, of course, are also looking for what can be gained should things change. This brings me to Tobias Adrian's paper on "<u>The Great Carbon Arbitrage</u>" (As an aside: I am compelled to cite Tobias simply as he remains a rather mythical figure around here!) In the paper, coauthored with Bolton and Kleinnijenhuis, they estimate massive—3 US GDP—gains from a well-executed transition to more renewable energy.

In a similar vein, <u>Conte, Desmet and Rossi-Hansberg</u> offer a tantalizing gain: the entire EU, and maybe the U.S. too, could grow if climate policy is done right. To me, these papers are important for the broader task of identifying win-win solutions, as those are precisely the things that allow US and global economic performance to be enhanced. To go back to Lucas, once one starts thinking about longer-run growth, it's hard to think about much else.

I'll close by noting something important that I left out. I didn't talk about the spatial dimensions of reallocation that are coming, and that some of you, including that of my colleague <u>Jose Luis-Cruz</u> whose work I invite you to look at on this front, are contributing so meaningfully to. In terms of political economy, it is hard for me to think about anything thornier to deal with, and this makes the current landscape of nation states and their borders a critical determinant of the human toll of large-scale change in climate.

I'll wrap here as the audience knows all this better than me, but Kristian invited me, so he is to blame for your suffering so far. Thank you for your time, and I wish you a very productive day.