Transcript of Research & Statistics Centennial Conference: Closing Remarks by Vice Chair Philip N. Jefferson

November 8, 2023

STACEY TEVLIN. So, folks, don't leave. We're not done yet. So we are fortunate we will have some closing remarks from Vice Chair Jefferson. But before we turn it over to Vice Chair Jefferson, I wanted to say a couple of things. I wanted to thank all of the speakers and presenters that did such a great job today, made it so interesting. I thought it was just a fantastic day.

Some of you probably are wondering when you can get the papers. The papers will be released as FEDS papers on the Fed's website. And so I don't know if they're ready immediately, but they'll be up pretty soon. So we can look forward to reading those.

I wanted to thank the committee that put together this great event. We're going to call them all out by name tomorrow, but you know who you are. And we all know who you are because you've got the "ask me" on the bottom of your tag. So if you see these people, thank them for putting together such a great conference.

I want to thank Chris Carroll for when he showed the forecast errors stopping in 2019. [Laughter]

CHRIS CARROLL. [Inaudible] You didn't have any way after.

STACEY TEVLIN. Nothing happened at all. Yep. I also wanted to just mention—so earlier today I had mentioned Thomas Laubach, and I was reminded during Arthur's conversation that we also lost Greg Elliehausen very recently—a big loss to the Fed family and the broader economics community. So I wanted to make sure I remembered Greg.

So it is my honor to introduce Vice Chair Jefferson. So like everyone else on the panel today—I mean, on the podium today, other than the Chair—Vice Chair Jefferson is an alum of

R&S. So he and I didn't actually overlap in R&S, but we overlapped briefly in Monetary Affairs. So I'm looking forward to his remarks. I'm thrilled that he has returned to us, and he is already making great contributions to the conversations that we're having in the boardroom, around the building, and in individual conversations. And so we're all really happy to have Vice Chair Jefferson on board. Please join me in welcoming him. [Applause]

VICE CHAIR JEFFERSON. Thank you very much, Stacey, for those remarks. And I realize that I'm standing between you and cocktails, so I will try to be brief. I do have some prepared remarks, and I appreciate you giving me this this opportunity. I want to thank the organizers for a very thought-provoking conference. Provoking thought and discussion are fitting ways to mark the centenary of the Division of Research and Statistics.

In keeping with the conference theme, I've organized my remarks around the past, the present, and the future of R&S. My reflection on the past, while idiosyncratic, is also a through line that characterizes the division historically. For me, that past begins in 1983, when I came to the Board as a newly minted college graduate to be a research assistant in the Government Finance Section now known as Fiscal Analysis. One of our primary tasks was to keep track of the volatile and somewhat unpredictable fluctuation in tax receipts. The daily numbers were transmitted not by computer but by telephone. Other data retrieval required RAs to go to the Treasury directly in the luxurious conveyance of a D.C. taxicab, reimbursed by the Board. Now, that was a little perk that, as it happened, never came my way.

In our section, though, it was a lot of time on the phone, and the two economists that I worked with, Al Teplin and Wolf Ramm—some of you may remember these individuals—would take down the numbers and pass them to me. Obviously, many things have changed in

R&S over the past 40 years. But one thing that hasn't changed much is the role of RAs in analyzing data and participating in other important functions performed by the division.

Back then, armed with those tax receipt numbers, I would be expected to put together a projection. My bosses had their own projections, of course, and they subjected my work to very careful review. But I was given that assignment because there was a widespread view then that RAs were here to learn and to contribute meaningfully to research and policy work. And I felt a considerable responsibility to do the very best [break in audio] I could with the important work that I had been given. Much has changed in R&S since then, but those values remain.

As a young college graduate, I was impressed with how seriously people at R&S took their responsibilities, whatever their role. I am not the only person whose experience as a young person in R&S was formative. In my case, it might seem remarkable that a former R&S research assistant has returned as Vice Chair, but for decades, former RAs have been returning and serving in leadership roles at the Board and throughout the System.

Moving from the past to the present, it has been a while since the things we thought we understood well about the economy were subject to as much debate as they are today. At the same time, an explosion of available data—much of it of high frequency and from unconventional or alternative sources—has given R&S many more potential avenues for analyzing the economy and, hence, much more to do. The list of alternative data sources available to forecast economic outcomes seems almost endless, including social media posts and web traffic, credit card purchases, geolocation, and satellite imagery.

These alternative data have transformed the way economists forecast future outcomes and measure the effectiveness of monetary policy. For example [break in audio], economists can use postings to social media sites to analyze investors', journalists', and households' real-time

interpretation of central bank communications. However, a wealth of data [break in audio] does not necessarily translate into better forecasts and better insights. Recent academic research suggests that alternative data mainly help forecast short-term outcomes and not so much long-term outcomes. This is why it is important that R&S continue to be at the forefront of research, making sure that we are making the right inferences with new tools and new data sources.

With respect to the future, my expectation is that today's challenges will persist. I've already mentioned one challenge, which is sure to make sure that we are acquiring the right alternative data, making the right inferences, and appropriately using tools such as artificial intelligence, including machine learning, to analyze this wealth of data. These tools may be very good at estimating correlations, but we know that correlation does not imply causation. Thus, their usefulness may be limited. Identifying a correlation in the data without identifying causation may lead policymakers to incorrect conclusions and therefore lead us to implement inappropriate policies. In addition, these tools are very good at data mining, which can be dangerous if it gives us the false sense that good in-sample fit leads to good out-of-sample forecasting.

Economists in R&S and other divisions, as well as academics, have made progress on this front. But there is room for further improvement. In addition to the challenge of how to best use these tools in data at the Fed, R&S faces the challenge of understanding what these new technologies mean for labor productivity and the economy.

The other challenge I want to highlight is that of making decisions under uncertainty. This is not a new challenge, of course. John Maynard Keynes and Frank Knight provided book length treatments of this subject a century ago. In addition, in 2003, Alan Greenspan observed, and I'm quoting, "Uncertainty is not just an important feature of the monetary policy landscape;

it is the defining characteristic of that landscape." Close quote. The fact that uncertainty has been a challenge for so long makes me think that it will continue to be a challenge going forward. And in the wake of the pandemic, it is highly salient.

In 1967, William Brainard argued that uncertainty about the power of monetary policy implied that policy should respond more cautiously to shocks than would be the case if this uncertainty did not exist. Brainard's attenuation principle is a classic example of what has come to be known as the Bayesian approach to uncertainty and is often cited as the foundation for gradualism in the adjustment of monetary policy. That said, methods based on theories of ambiguity aversion led to anti-attenuation. In other words, to protect against uncertainty, the appropriate response may be a quick and strong monetary policy response.

As Chair Powell mentioned in a speech in 2018, there are two particularly important cases in which doing too little when there is high uncertainty comes with higher costs than doing too much. The first case is when attempting to avoid severe adverse events such as financial crises. In this situation, words like "we will do whatever it takes" will likely be more effective than "we will take cautious steps." The second case is when inflation expectations threaten to become unanchored. If expectations were to begin to drift, the reality or expectation of a weak monetary policy response would exacerbate the problem. Of course, the right response to uncertainty is probably context specific and thus varies over time.

How to respond to uncertainty is a matter that the Federal Open Market Committee, with the help of R&S, has been wrestling with for a long time. While I could be wrong, as of today, I do not foresee that some all-powerful artificial intelligence that will be able to predict perfectly the balance of the risk of doing too much or doing too little. Therefore, I expect that, long into the future, we will be relying on the knowledge and good judgment of people in R&S to weigh

the risks and to help in providing options to monetary policymakers so that they can make informed decisions.

In closing, congratulations on a century of service to the Fed and the American people. I have every expectation that the next 100 years of the Division of Research and Statistics will be just as integral to the prosperity and well-being of the American people as it has been to date. Thank you.