Transcript of Research & Statistics Centennial Conference: Critical Moments in the Economy and the Role of R&S, the Challenges We Faced, and Lessons for the Future

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MATT EICHNER. Reserve Bank Operations and Payment Systems here at the Board. I'm particularly gratified to be here today and to have been invited to be part of this celebration. Unlike many others in the room, I did not spend the bulk of my career at the Board in R&S, and, obviously, you've heard from people this morning—Andreas Lehnert, Mike Gibson—who, like me, spent time in R&S and then went on to take leadership roles in other parts of the organization.

But I actually didn't really spend the bulk of my career here at the Board. I, somewhat unusually, I think, among many in the room—I sort of came in already, I don't know, half-formed, shall we say, around 15 years ago—not coincidentally, during the 2008 financial crisis. Pat talked earlier this morning about chasing people around at the CFTC and the SEC. And I was at the SEC, and I was probably one of those people that Pat was talking about in terms of having to chase me around as he worked here to manage some of the things that needed to be managed during the 2008 crisis.

So I was pleased then to have the opportunity to come over here. And, in fact, given this somewhat circuitous path, I think I remember Dave Stockton very graciously and gently asking a question or two—I think he—as you put it, a "labor force attachment"—when I first came over. But it anyway seems to have—

DAVE STOCKTON. Did I say that you needed to pay attention to data? [Laughter]

MATT EICHNER. I think this is something—but you emphasized particularly labor force attachment, I think, at the time. So—but I have now made it through 15 years, and maybe Dave is a little less concerned than he was.

But the topic of this panel is critical moments and challenges. Obviously, we've talked about a lot of those over the course of the day. The panel that Pat and Andreas, Mike Gibson did before lunch dealt with some of those on the, if you will, financial side of the division. There's also been discussion of some on the real side, including the experiment of shutting the economy down in 2020 and then dealing with the inflation in 2021—not to mention learning about the practice of the zero lower bound as well as the theory.

So there's certainly plenty of critical moments and challenges without going back to the, I don't know, 1950s or even the 1970s. But as somebody who joined the Board and R&S somewhat later in life, if you will, I guess as I think about how this division has met the critical moments and challenges—I'm sure these folks will talk more about that—I guess three things really struck me coming here in 2008, having spent the bulk of my career, or the first part of my career, if you will. We'll see how long my career goes and whether it's the bulk or not. But having spent the first part of my career elsewhere, I think there were really three things that struck me fundamentally about R&S and maybe the Board writ large—but especially R&S.

The first is, this is the first place I ever worked where it was absolutely understood that doing research and doing policy work were not substitutes but were really complements—that what we were doing in the research space made us better in the policy space and what we did in the policy space made us better in the research space. That may go without saying in this room.

But as somebody who spent a chunk of their career in other places, it's worth maybe saying once or twice. The second thing that I would notice in coming here in 2008 was, other places where I worked—succession planning usually began after the farewell party for whoever needed to be succeeded. And if you worked in a really good organization, maybe it was after the retirement announcement.

This was a place where, literally from the day I got here, Pat Parkinson and Dave Stockton and David Wilcox were constantly drumming, “Who’s going to take your job after you? Who else can do this work?” And that really is a fundamentally different way to run an organization than anything I’d experienced—and one that I have become absolutely convinced is an important and the right way.

And then the last thing that I would say is that I came here in 2008, which was not an uneventful year, and there were moments in 2008 where I think questions were raised about how the Fed had done. One of the things, though, that was really interesting to me, having, as I say, been in other organizations, was that among the people raising those questions were Don Kohn and then, when he sort of passed the mantle, David Wilcox.

And there was a degree of introspection here, and I think there was even an introspective process that David at one point led, which really surprised me. I had not been in other organizations where the response to something that maybe didn’t go so well was introspection rather than, I don’t know, circling the wagons—finding someone else to blame—something like that.

So those were three things that really struck me when I got here in 2008 and three things that really have stayed with me since then. And I feel like those are all things I’ve learned through my time in R&S. So as the panel goes forward and talks about critical moments and challenges, I think some of these cultural attributes are really important.

So with that, I’ll turn it over to Bill to introduce the panel and get us started. Thank you so much for the opportunity to be here today. [Applause]

WILLIAM WASCHER. Thank you, Matt. I guess, first of all, I would like to thank the organizers for asking me to moderate this panel. I should say they didn’t really ask me, they just told me I was going to do it [laughter], but I'm glad they did. I've worked for five division directors during my time at the Board. Jim Kichline was division director when I started in 1983, but I've worked most closely with the four here, and so let me just introduce them each very briefly: First of all, Mike Prell, who was division director starting in the late 1980s through the 1990s; David Wilcox—I'm sorry, Dave Stockton, who was division director starting in the early 2000s through the financial crisis; David Wilcox, who took over for Dave Stockton after the financial crisis; and then Stacey Tevlin, who started as division director just prior to the—shortly before the pandemic—lucky her.

And what I want to say is—as I said, I was able to work closely with each of these in different roles, obviously, but I got to know them pretty well. And for those of you who know them, they have very different personalities and very different leadership styles. But the thing that's consistent about all of them is, they were very successful and, personally, for me, very supportive of my work, and I found it very rewarding to work for each of them.

And what I'd like to do today is to ask them a series of questions pertaining to their time at the Board. And I'm going to start with Mike. Mike, you were the most senior member of our panel—or you are the most senior member of our panel. And so you've experienced a lot of different events during your time in Research and Statistics. And I wonder for us if you could highlight what in your experience might be relevant to R&S today and going forward.

MIKE PRELL. Well, thank you, Bill. I'd like to say it's an unmitigated pleasure to be here today, but, as even back in the fifth grade was spotted, I'm a very reluctant public speaker. I thought, though, knowing that my successors have always viewed me as a sort of father figure, I felt obliged to show up today in their support—so. To be as concise as possible timewise, I'm going to follow the example of our esteemed Chairman this morning and read my prepared remarks here.

My career in R&S spanned essentially the third quarter of what is now a century of history. As I reviewed my experience for today, one thought kept coming to mind: The more things have changed since my time, the more they've remained the same.

I suspect you'll share my perception as I engage in a bit of reminiscence and reflection. My first job out of Berkeley was at the Kansas City Fed. That's a line on the resumes of more than a few folks who came to the Division of Research and Statistics before, with, and after me. It didn't take very long for me to conclude that the Bank wasn't the best fit for me.

Attending a couple of System research meetings and reading the material that came from the Board, the grass definitely looked greener in D.C., and, consequently, I was pleased when, in 1973, I was able to find a position here. Now, as has been noted previously today, the 1960s and early '70s were a time of great ferment in macro and monetary economics—and in econometric modeling—and R&S was in the middle of it.

Division management had spotted the growing wave and decided to surf it by hiring a cast of talented economists possessing contemporary technical skills. These folks were well connected to the outside research community, as reflected notably in the cross-institutional collaboration on what eventually evolved into the Board's FRB/US model. To be sure, these folks harbored some unrealistic ambitions, but their work nonetheless yielded analytical insights and econometric tools of lasting value and warranted influence.

Plus, there was the bonus that they elevated the academic standing of the division—a definite recruiting aid for all of us. I knew I didn't have what it would have taken to run with this crew. Fortunately, however, I didn't aspire to. Rather, it was the division's in-depth current analysis, judgmental forecasting, and applied policy work that grabbed me.

In my first two years in the Capital Markets and Banking sections, there was a period that involved a lot of issues relating to the stresses then faced by financial institutions, which were confronted by a combination of cyclical movements in interest rates, asset–liability mismatches, and innovations in financial technology, including the advent of money market funds. I participated in the continual tinkering with Reg Q ceilings and reserve requirements during this period. At the same time, colleagues on the micro side of the division thought deeply about banking market structure, capital requirements, and deposit insurance.

During my third year spent in the Government Finance Section—this was preprogrammed; I did not keep getting booted out of these sections [laughter]—we monitored daily open market operations, examined the risks and benefits of proposed trading and interest rate futures, and followed Treasury debt management in an era of massive federal deficits measuring in—shudder—tens of billions of dollars.

Meanwhile, as the '70s progressed, the economy encountered some serious nonfinancial shocks, not least soaring oil prices, and we failed miserably in addressing a rising inflation trend. That's both speaking of staff and of our principals, I'm afraid.

In 1978, after an interlude as chief of Capital Markets, I became the senior officer on the macrofinancial side of the division and assumed responsibility for our financial projections. I'll confess that mistakes were made in gauging what levels of interest rates would get the job done in bringing inflation under control. The adoption of the money stock–targeting regime under Paul Volcker clearly wasn't a solution—as in part owing again to changing financial technology.

We repeatedly missed our targets, and the FOMC had to decide whether to adjust them and, it was argued, risk losing credibility. Of course, on the nonfinancial side of things, we were at sea and judging the amount of unemployment that might be involved in returning inflation to an acceptable level.

I don't want to take too much time in this stroll down memory lane, so I'll mention just one other challenge we faced—this during my tenure as director—namely, the stock market bubble of the late 1990s. I was absolutely convinced that investors had gone wild and that reality ultimately would bite, potentially painfully. Chairman Greenspan, in his fashion, famously spoke of irrational exuberance at AEI in December 1996, but he became ever more cautious in his comments after that.

While he regaled his FOMC colleagues with speculations about a long wave of faster productivity growth based on the new communications and info tech that had emerged, government officials saw a political hazard, too, in publicly second-guessing a market boom that was making a lot of people wealthier. Moreover, with bubbles, there is always a concern that an intervention could precipitate an even harsher outcome.

So policymakers effectively crossed their fingers and let things ride. The staff, meanwhile, struggled for some time with the forecasting problem presented by the bubble, not knowing when it would pop and what economic damage would result. My recollection is that when the bubble popped, the damage wasn't all that severe, perhaps demonstrating the relevance of wealth-distribution data that was discussed just a short time ago.

Of course, the division's forecasting work rarely was easy. If it wasn't one thing, it was another. As we endeavor to bring useful intelligence to our decisionmakers, those of you here during the past couple of decades must have felt the same way. Unfortunately, it's a fact of life that efforts to develop reliable, empirically based macro models encounter formidable barriers in a world marked by what I think George Soros referred to as "reflexivity" as well as by constant change in underlying environmental factors: wars, pandemics, political upheavals, Taylor Swifts.

In these circumstances, the kind of close observation of current developments that I presume the R&S staff still does certainly can be helpful; indeed, it's truly essential. But all that still leaves us with a drastically limited ability to foresee the future.

This point certainly hasn't been lost on Chair Powell, who repeatedly has emphasized the inherent uncertainty of economic projections. Still, though, the public rhetoric of Fed policy involves a set of unknown macro parameters and forecasts with numbers to the right sides of decimal points. For me, it's rather a muddle crying out for a better approach. I don't really have a thoroughgoing solution to offer.

That said, I have every expectation that if my dark scientific pessimism is proven unwarranted, a talented and dedicated R&S staff will have played a major role in surrounding the obstacles and lighting the pathway to better policy formation. Before yielding the floor to one of my successors, I must acknowledge that I have thus far unfairly neglected the important work of major parts of R&S.

While we've devoted some time already this afternoon, I certainly would feel I would have been remiss if I didn't recognize, at least briefly, the division's distinguished history in the development of economic and financial data and statistical methods. One marker of the standing of the division in this realm is that E.A. Goldenweiser, the remarkable early and longest-time director of R&S, was president of both the American Statistical Association and the American Economic Association—the first before the second.

Over the past century, R&S data programs have served not only the Board's interests, but also have been indispensable to vast numbers of outside users. I trust that this great tradition will be sustained in coming years, even if it appears these days that facts are held in some bad odor in some circles. Thank you.

WILLIAM WASCHER. Thank you, Mike. Let's go next to Dave Stockton. Dave, you were division director during the financial crisis, and I wonder if you could talk a little bit about how R&S responded to the crisis and what factors contributed to that response.

DAVE STOCKTON. Sure, Bill. I think the financial crisis in many ways brought into pretty sharp focus a number of key characteristics of the division and the way the division works.

To say the least, it put enormous stress on virtually every corner of the division, from the infrastructure and data sides, as we talked about two days ago, to microfinancial sections, to the financial sections, to the macro, to the monetary policy. Everything is built over maybe six months' time, but by the middle of 2008, it was pretty clear this was going to be a major event for the staff in the division, and it was going to require the implicit contract that we'd all developed.

You know, when you get hired, in addition to looking at data, there's an implicit contract that you'll get some time for independent research—some policy work—and then you'll have some current analysis–type work. Well, we went from that sort of implicit contract almost immediately to, "This is going to be policy work." And much of it would be directed by the likes of Vice Chair Kohn but also other Board members and the staff itself. I think the staff was really important.

You know, I was really impressed with how quickly and willingly folks shifted their focus. And in my 11 years as director, I had plenty of people in my office complaining about a lot of things—the vending machines, their computing power, the length of the GDP meetings [laughter]. On that last one, I will plead guilty and offer an apology to those of you who had to suffer through that. But I can honestly say, during the financial crisis, at its peak, I never had anybody come into my office and say, "This is too much. We can't take it. We need a break." They came in asking for more data—better access to data, money for data—but nobody really in the entire division ever came, to me at least, and complained about the workload, because the workload was enormous.

I sometimes bristle at some of the outside portrayal of the Fed and Fed staff as being a bunch of technocrats sort of focused on financial developments and maybe economic developments. And we are technocrats to some degree—that's true. But I think during the financial crisis, you could tell everybody in the division understood the consequences of the work they were doing. Whether it was when you were in the Board Room on a Sunday night before some important decision had to be taken, people knew that they were worried about it—not because they cared about the shareholders of Bear Stearns, but they understood that the wrong decision could have enormous consequences for millions—yeah, maybe billions of people.

Also, those people weren't in my office the first Friday of every month for about a year and a half when the labor folks would come through and talk about the labor market report. And I was really impressed with the quality of analysis that people brought. But I also knew they were carrying a significant emotional burden from their work because minus 880,000 on payrolls wasn't a statistic—that was, like, a lot of people.

And I think I was both impressed that folks were able to maintain their equilibrium while they were producing this kind of analysis. So it was really quite impressive. A second aspect of the division's organization, a way it works that I thought the crisis made us think more about, is getting the right mix between specialists and generalists—that is, people with very specific capital on a specific issue, market, institution and those that just have general broad economic human capital that they could apply.

So I know the first thought would be, "Would you have been better off if we had lots of experts in all these markets?" I mean, for a year and a half, it seemed like we'd wake up every week and there would be some development in some financial institution, some financial market, some area of the financial system that not even Andreas Lehnert or Mike Gibson and Dan Covitz had ever heard of before.

But the response to that crisis, I think, was improved by the fact that we had a lot of very smart people with general human capital that could be applied to thinking about creating novel solutions and approaches to those kinds of problems. And I would kind of wonder, if we had been populated principally by specialists, whether we would have been able to be thinking about creating the kinds of policy responses that we needed.

And, I mean, you think about the development of the stress tests or the 21 memos on large-scale asset purchases that had to be produced in six weeks' time for the Board—the people that were working on those things certainly were experts in macroeconomics and experts in finance. But what they were bringing to the table really was a set of broad pieces of human capital that they could apply to these problems, and that, I think, was available because the division had a tradition of sponsoring and supporting research.

So maybe as division directors, we'd look at the titles and say, "Why are we doing that?" But it didn't—but we lucked—we took the chance to let people do that kind of thing so that they could develop the kinds of tools—that we could hire and retain really smart people to address really difficult decisions. So—and I would say, to some extent, the Board deserves some credit for that, too, because the Board provided us with sufficient resources to do that.

Not all the time, not every particular instance—but in general, we've been able to create and maintain a research environment that has allowed us to have first-class people in all areas of the division—whether that goes from infrastructure right on through to macro monetary policy. Which brings me to another notable feature of Research and Statistics, which was really—I think I worked at several central banks after I left the Fed. One of the things that's different about Research and Statistics and what you see at most other central banks is, many central banks have a research department, and that's the place for—as I said on Monday, the guys with the white lab coats would hang out and then get all these other people going into the coal mine every day to create forecasts and data analysis and whatever.

This isn't the case here. And it's also the case that the forecasts in many central banks are organized around a chief economist—the chief economist who leads the development of the forecast and the presentation of the forecasts. But the chief economist is also a policymaker. Well, that kind of arrangement, I think, can often lead to some dissatisfaction by the policymakers who aren't always sure that they're getting from the chief economist a completely unbiased view—but maybe a view that the chief economist wants to promote for his or her policy purposes.

The Board obviously has supported the independence of the development, at least on the economic-forecast side, and its presentation—it served different Chairs differently. I mean, Greenspan loved that separation—that independence—because he would like to go into the FOMC and say, "That's just a Greenbook forecast. They don't know what they're talking about." Bernanke, on the other hand, I think, embraced it in the way that it was meant to—as an important input into the policy—but, obviously, he had other policymakers use their judgment to have their views deviate when need be.

So I think it was impressive to me, again, in my 11 years, that I never had a Chair or a Board member call me up and say, "My life would be a little easier if that inflation figure at the end of this was like, you know—could you just do me a favor?"

No interference—same thing on research results. Board members would certainly request research on certain topics, but they never requested a result from research: "Here's what—I really need something to show this." So some of our research sometimes helps support the views of policymakers, but sometimes it didn't. But they let us do it.

In terms of one other aspect that I think is more difficult and maybe a challenge and more problematic for the way that we're organized—we run by consensus. I mean, with the division, both on the macro and the forecasting side, but also on the financial side, you get a bunch of smart people in a room, you talk about an issue, you develop a view, and you communicate that view.

I think the financial crisis suggests that we need to work at and think more carefully about—the consensus, I think, could sometimes dull the edges of some of the sharper alternative views and criticisms of the consensus view. And how to develop vehicles for providing that kind of—I'm not talking about one or two epsilons different. You know, we sort of do that with the alternative simulations. But I'm talking about something more significant, where you could be wrong in a big way. And that might require, I think, trying to find folks outside the institution; we're helped by the fact that the Federal Reserve Banks could play that role a little bit.

But even that's probably an imperfect role. And a corollary to that—I would say I would recommend that sometimes it's better to use your imagination than your models. And here's why I say that: The models are a consensus. They are the formation of a consensus—the embrace of a consensus. And we know the world can be so much more nonlinear and discontinuous than our models that you—we need to have ways of thinking again about ways in which the models could not just be wrong by a little bit but by a lot.

Now, it sounds like some of this by—successors have been working on those kinds of issues as well. I saw them at the other central banks I visited as well. But for the most part, this is an amazing organization populated by really dedicated, committed individuals to the public good. And I guess I'd argue this place is so good, it's worth your effort to…[break in audio]

WILLIAM WASCHER. [Inaudible] Stacey, you didn't have to confront a major crisis during your time as a director. How did that shape the focus of your priorities when you were division director? [Laughter]

DAVID WILCOX. So I don't know whether Stacey remembers this or not—probably not as clearly as I do—but I ran into Stacey, I think, a little over a year ago, and she looked at me kind of wistfully and said, "Are you the only living R&S director not to have served at a time of crisis? And I said, "Well, I didn't know how Mike would classify his tenure and whether there was a crisis in there or not."

MIKE PRELL. [Inaudible] [Laughter]

DAVID WILCOX. But I think that is the central fact of my time as director—that my timing was good. I got in after the financial crisis and left before COVID, and that turned out to be about the sweet spot of my tenure. For that reason, I'm going to place myself at a negotiating disadvantage and be quite concise in this round in hopes that Gresham's law doesn't prevail and my colleagues don't expand to take up the extra space, because I do have some other thoughts later on.

I just want to shout out to Janice, who helped crystallize the idea that actually the central fact about my time as director was indeed that I didn't serve at a time of crisis. There were challenges on the monetary policy front.

For example, when I assumed the title of division director, the unemployment rate in mid-2011 was still 9 percent. It's kind of hard to conceive of that. What's stranger from the perspective of today is that the inflation rate had been rising through that period. And so one tide of thought that we confronted that was pretty prevalent, and there were a couple of members of the Open Market Committee who were especially vocal about this—I won't name names—was that, well, maybe the natural rate of unemployment had risen so much that actually monetary policy needed to be much tighter in order to make sure to control inflation. To his credit, Chair Bernanke never gave in to that and was consistent in the view that fiscal policy, frankly, was pulling in the wrong direction and monetary policy needed to be maximally expansionary.

We didn't get the pace of recovery that anybody wanted, but it was faster for the fact that Ben's view prevailed. But that was all relatively routine in the area of monetary policy. So I thought I'd just highlight very quickly three other areas that I and the division devoted our focus and energy on during those times.

One of the first of those was the founding and establishment of what started out as the Office of Financial Stability. The point of this, in essence, was to try to make sure that another financial crisis didn't happen in our lifetimes. I'm sure we have not seen the last financial crisis of human history, but the idea was to try to perform an extremely difficult exercise of looking around corners as much as possible and recognizing weaknesses—structural defects—that gave rise to serious vulnerabilities that might undermine economic activity and have terrible consequences for human welfare.

So it was a privilege to seed the Office of Financial Stability with some of our esteemed colleagues—of course, Nellie Liang and Andreas Lehnert—but many others who went off and established that very important function.

A second area of deep investment during this time was data. Some of that involved some missteps, to be perfectly honest. We played a key role in the establishment of something called the Office of the Chief Data Officer. It seemed like a good idea at the time. I was fully invested in that. I own that as much as anybody else. It didn't work out well. And I think an important lesson to take away from that was that part of failure is owning up to that and learning the mistake and trying something else. And so I'm absolutely thrilled that today, if anything, the data function in R&S is more vibrant than it ever was and that the lessons were learned and that a pivot was made and gone in the other direction.

A second aspect of the data agenda was the complete—we've heard about this earlier this week—the complete reinvention of the concept of what it means to be a librarian. There is now an absolutely critical function in the library of data acquisition, contract management, and so much more than people of my ilk could ever hope to understand. And the division runs better for it.

There was a third aspect that was the sort of establishment and growth of a major effort to develop alternative measures of economic activity. The early instances of this had to do with employment through our ADP relationship and consumer spending through—sort of makes me sound a little demented to say "First Data data"—but later, fortunately, First Data became Fiserv, if I understand correctly.

So now we have a different and less awkward phrase. These are critical functions for conducting real-time surveillance on behalf of monetary policymakers about what's going on in the economy. And it is utterly fantastic that that franchise has mushroomed across so much more in the time since those two early franchises were established. And then the last one was nowcasting, which is, I think, also an important and qualitatively different function that is occurring in the division.

The third and final thing that I'll mention that was an important pursuit of that time was the real invigoration of a serious agenda on diversity, equity, and inclusion. And we were working on—we were standing on the foundations that had been laid in earlier years. We were not starting from scratch. But, to be honest, we started with a rather difficult relationship with some other aspects of the Board, and there was a critical conversation that I remember taking place between Janice and me where we decided, "Okay, we're going to stop asking for permission, and we'll ask for absolution. We're going to do some things—try some things differently."

And I give profound credit to Janice for helping spearhead that. Janice and Amanda Bayer, believe it or not, in about 2013-ish or so, organized and hosted a critically important conference on diversity issues in the economic workplace. It was hosted in this building, up on the Terrace Level.

It was really, I think, a watershed event. I am absolutely thrilled, but not surprised to hear over the past few days, that work in this area continues and is pushed way beyond where it was on the day that I—that the door closed on me for the last time. Let me close with a conviction: Our work in this area will never be done.

This is an ongoing and imperative pursuit for all of us. Our organization is richer when we recognize and leverage the fact that people are bringing their whole selves into the workplace. Every characteristic that makes them who they are—their range of prior experiences, their life stories, the elements that make every individual different from those of us who've gone before—the institution is stronger for that, and I hope that effort will push forward with only increased urgency into the future. [Applause]

WILLIAM WASCHER. Okay. Finally, Stacey—so I know that we're still in the thick of things, so it might be difficult for you to take the long-term—the long-run perspective, but I wonder if there are some things that you already know will be key takeaways and lessons from your time as director.

STACEY TEVLIN. So many lessons. So, first of all, I think the questions that I really will want to know from this period and that probably most of you want to know from this period—it's just too early to really say. We'd like to know, what are the structural changes in the U.S. economy—in economic activity and inflation?

Those are the questions that we really want to understand—what are the implications of this huge event we've just been through over the last few years? And we don't know yet, and it's going to take a while. So, obviously, the huge increase in working from home will have implications for labor force participation—for the spatial distribution of housing and housing prices and productivity—so many other things.

And we saw a huge surge in business formations over the last few years. We also saw a big learning loss in the education system. How all these things are going to sort out in terms of productivity are absolutely the lessons that are the most important from this period for the macroeconomy.

But we just—too early to know—so stay tuned on that. I imagine people will be doing research on it for decades—looking at this huge watershed moment. I think I can identify some takeaways from this period. But they have, I think, more to do with how we study the economy and how we organize ourselves rather than about the economy itself.

So I think one of the things I would identify is that heterogeneity is so important to understanding the economy. Now, that sounds like I shouldn't be learning that lesson right now, given what we heard from Chris and from Arthur earlier. And, obviously, we've known that for a long time, and we've developed the Distributional Financial Accounts and all of these data sources—the profession has had HANK models for a dozen years or so.

So those were lessons that were always being learned. But just the size of these shocks just really drove home how much the heterogeneity matters for understanding all of the macro relationships. So the obvious example is the Economic Impact Payments, which hit different—went to different households, and those households had different spending patterns inherently.

That's the question we've been asking for years—right?—in trying to understand how distribution interacts with consumption. And we got this huge shock, and it became clear that was really one of the driving things that's affected consumption patterns and also the excess saving that we're still trying to understand exactly how they're going to spend that out—so really huge issues.

The other one I would highlight there is that it's really important where we're spending. So a particular level of consumption, if it's evenly spread across all the consumption, is really different than if everybody spends on goods at the same time—for supply chains and inflation. And that kind of heterogeneity also—the industry or the goods versus services—all of those things are also really important things that we have to make sure are showing up in our macro models and in our understanding of the economy.

And that one, I think, was more of a surprise than how the Economic Impact Payments played out. So lesson number one—heterogeneity is really important. The second one I would say is that in a really big event like this—in a big crisis—at least for us, it was really important to be nimble and to basically just set aside how we did almost everything.

All of our data—almost all of our data—all of our models, even the very notion that it's important to focus on a modal forecast of the economy—those things just had to be set aside. We had to do it in a completely different way to provide policymakers with the things that would be the most helpful for them in making these really tough decisions.

And so, with a clean slate, it was pretty amazing to see all the things that people came up with. So our macro modelers became epidemiologists. Our data experts developed new sets of data and new types of things. You know, we had economists and analysts who were busy doing the background analysis to sort of develop and parameterize new backstop facilities.

You know, everybody was all hands on deck. It sounds kind of like it was during the Great Recession, which I guess I should remember because I was here. [Laughter]

DAVID WILCOX. I can't imagine why you don't. [Laughter]

STACEY TEVLIN. And so, yes, it was just, people—that was something that struck me as—just, like, how people were able to just pivot and do completely different things and how important it was that they did that. And, again—picking up on what Dave said—without complaint. Really, people understood this was an important moment. We really needed to be all hands on deck, and people were just there.

And so "nimble" is the second one. The third one, I would say—and this picks up a little bit on what David was saying—is that it's really important to make the key investments during the quieter times. So we were very fortunate during the early days of the pandemic that R&S,

importantly led by David, had made a lot of investments in big data—not just that we had sort of higher-frequency and finer data, and those things were important, but we had built out the skill sets.

We had a lot of people who knew how to go out and acquire data and knew how to clean it and store it and be suspicious of it and remember not to take too much inference from it if you don't really understand it very well. That kind of expertise takes some time to build up, and we had already done that.

And so that, I think, really helped us be successful during the early days of the pandemic. And then the other thing that happens—maybe not just in the quieter times, but ahead of time—that you want to get done is building the relationships between people. So that, to me, was something that was very important for us during the pandemic, that we could stand on that strength, because—many of us had been here for a lot of years. We knew each other. We'd worked together. We trusted each other. I understood where the experts were. They knew me well. You know, we all had built up those relationships over years and years. And then we were able to work from that. And that was especially important because we were all, of course, sitting alone in our own home offices doing this, right?

And so it's a lot easier to call someone at 8:00 at night, and you have something you really need, and you haven't seen any humans in person for a long time, but it's somebody you've worked with for a long time. I'm looking at David Lebow when I say this—I know this [laughter]—and so that's an important thing.

And that, to me, is something I'm very cognizant of now, as we're—this isn't a quiet time, I wouldn't say. Inflation's too high for this to be a quiet time. But I want to make sure that we're continuing to build those relationships in the division so that we can work off of them in the future. And it's a little more challenging now because we're not all in person all the time. And, you know, we're in two different buildings. But that's a very important investment. That's, I think—is really important. And I feel like we learned that during the pandemic.

And then—so I guess this isn't really a lesson. This is just something I was thinking as I was listening to people kind of over the last day—that one of the things that I think is so nice about being a Fed staffer, so important, is that we're nonpartisan, and people tend to have long tenures. And that means that we really have time to let the projects that have long gestation periods develop. We could do the expanded measurement agenda. We could develop the Division of Financial Stability—all these things that we worked on. And you could see it in lots of the stuff that was going on over the last few days—the slides that people would put up. You'd see things that they'd worked on for 10 years, right? And we have that freedom to do that because we don't keep turning over our staff every four years.

People don't keep leaving, right? It's that those long tenures and the nonpartisan nature of this place, I think, is really one of its strengths. [Applause]

WILLIAM WASCHER. Thank you, Stacey. So I just wanted to follow up with a general question for anybody who wants to jump in. As former and current leaders of the division, I wonder what advice you have for future leaders of the division, some of whom might be in this room. Maybe David—I'll let you start if you'd like.

DAVID WILCOX. I do want to start out first by thanking and recognizing everybody who's made this an incredible event. I think—to paraphrase something memorable that I won't get quite right—but the much-quoted Dave Stockton once upon a time said we really know how to throw a party in R&S. We go get some plastic jugs of Diet Coke and a couple of boxes of cookies, and that's about it.

It took vision to recognize that this could be a really, I think, formative event itself in the history of the division. It's much more than sort of putting the division in a museum case and letting it sit there and admire what has been. So I want to thank the organizers for having that vision, and thanks especially to Jaime and Janice for two incredible presentations that I think encapsulated a lot of what's going on.

And I really actually want to jump off from there. I'm mindful that, for the most part, I think, the people in this room are probably above the median age of the division. If you'll forgive me, I'm going to not direct these comments mainly at you, but I'm going to direct these comments mainly at people below the median age in the division.

I came in the building 43 years ago for the first time as an employee, and I just want to speak for a moment to people who might just be embarking on their own 43-year journey here at the Federal Reserve Board. What's incredible about this event is that it has reminded me so well of what makes this place different and special.

Guess what? It's populated by human beings. And those human beings who populate the Federal Reserve Board make mistakes. What I think—and sometimes they're really serious mistakes. What I think makes us a little different is that we own up—we have a culture of attempting to own up to those mistakes and to learn from those mistakes and to get better from those mistakes.

In addition, what makes this group of people different is that we're really clear about what we stand for as an organization. Some of the things that we stand for are serving the Board and the American people with distinction and creativity. We stand for defying every day the stereotypical image of what a government agency is supposed to look like and how a government agency is supposed to behave.

We stand for creating a workplace where every willing individual is placed in an environment where they can contribute to the utmost of their abilities, where the greatest barrier to their achievement is their own intrinsic limitations but those barriers aren't coming from the people around them or from the environment in which they work. As I mentioned before, we stand for recognizing the whole person who comes into work every day and appreciating that that whole person is absolutely essential and central to our success as an organization.

And we stand for recognizing that we're stronger when there's a wide diversity of life experiences, characteristics—all the things that make us who we are. So that's just a few of the things that we stand for. Lots of organizations say that they stand for these kinds of values. In my experience, and I've now been at a number of them, it's rare to have this characteristic. And R&S is different because we're intentional about attempting to live up to these ideals.

And the second point I want to make—and I'll leave off with this one—is, I want to use an analogy from wilderness camping, which is something that was quite important to me as a boy. There was an ethos at that time that a common aspiration was to leave no trace and make it so that the next person who comes along and pitches their tent at that campsite has no idea that you were there previously.

In wilderness camping, that's a fine aspiration, but not here. And I want to encourage that younger generation to aim for something much bigger and higher. This is your campground. This is where you could pitch your tent for the next 43 years. And I hope you'll leave plenty of reasons for others to know that you were here and remember that you did your utmost to make this a better place—both for the American people, for the colleagues around you—that you generated positive externalities, helped others be the best versions of themselves, and helped the organization to achieve what it otherwise could not have done.

By your very presence, you are changing this place. You have no choice about that. What you do have a choice about is how you change that place. And so I hope you'll be intentional about that and aspire to leaving the campground a better, richer, more enduring place for the next generation of people who will be pitching their tents here over the next 43 years. [Applause]

DAVE STOCKTON. Well, that was a very inspirational speech, and I'm not sure I'm going to measure up to that. I would say that in this notion of future leaders—what you would say to future leaders—one thing I'd say is, there are lots of different ways to be a leader in this organization.

We tend to think of it as like being, "Oh, that means you want to be section chief or assistant director—division director." You can lead in a lot of different ways. I take an example—Flint Brayton, who isn't here today, was a line officer at one point, and he came into my office and said, "I don't want to do this anymore. I want to go back to doing macroeconomics."

And Flint was an intellectual leader we all sort of looked up to. So you can be a leader without being part of a management or organizational structure and play an important role that way. And I'm about ready to insult probably a bunch of people here, including all of us up here. So the division directors typically aren't the smartest [laughter] or the most research-oriented people in the division.

They tend to be people that can maximize the abilities of others by putting them in a position to be productive and to make important contributions. I'm not suggesting you should go for mediocre if you want to be a division director [laughter], but I'm just suggesting that thinking about it—it's not true, I mean, that you—there are lots of different ways you can contribute.

Leadership means getting other people to assist you in doing things—moving in a direction—and there are a lot of ways you could do that without even aspiring to be part of an organizational chart. So I guess I'll stop there.

STACEY TEVLIN. I'll go. So I guess I would say two things. One is that if you become a division director or you're aspiring to be a division director, part of the reason you got to that stage in your career is by leaning on your colleagues and collaborating with your colleagues. And you should just continue to do that. Don't feel like, "Now you're the division director—you have to do everything," right? There's this huge staff, and they really do all the work.

And so those are—sort of what got you there continues to serve you well. The other thing I would say is that, as a division director, you make a lot of decisions every day. Someone asked me what I do one time—someone who doesn't know anything about the Fed. And I basically said, "I read things, and I make decisions. And that's kind of all I do." But the thing is that the decisions that I make—typically, the easier decisions don't really come to me. So I usually make decisions where there isn't really a good choice. And so it's a hard decision to make. And I think what serves me well when I'm trying to figure out how to make a thorny decision is to go back to what my values are—to ask myself, "How does this fit in with the values that I have for myself and I have for the division?"

And so I think if you're somebody who's aspiring to be a leader or a division director, you want to ask yourself what your values are for yourself and the division, because those are the things that I end up leaning on all the time when I'm trying to make decisions.

WILLIAM WASCHER. So maybe my last question is just if there's anything else you want to say that you didn't get a chance to say—reflecting on your time as division director. And if not, I can open it up to questions from the floor. But I want to give you one more chance.

STACEY TEVLIN. I mean, I just want to thank all three of these people who I worked for and who were mentors to me, along with many other people in this room. They showed me how to do it, and they set things up to be so that I could be more successful, because it was already such a successful organization when I started to lead it. Now Ted's laughing at that. [Laughter] I don't know.

TED TRUMAN. I was suggesting they showed you also how not to do it. [Laughter]

DAVE STOCKTON. There's a little bit of that. There's truth to that.

WILLIAM WASCHER. So any questions from the floor?

EILEEN MAUSKOPF. Bill, can I say two things tangentially?

WILLIAM WASCHER. Eileen, sure.

EILEEN MAUSKOPF. One, Jeff Fuhrer—speaking of Dave's comments on diversity, I would like to, because he's too modest to say this himself [laughter], but Jeff has a newly published book by—is it MIT Press, Jeff?—*The Myth That Surrounds Us*. Do I have the verb right?

JEFFREY FUHRER. *The Myth That Made Us*.

EILEEN MAUSKOPF. *The Myth That Made Us*. And it relates to diversity and what we—at least my generation of economists—learned, that the market determines who's rich, who's poor. Jeff's book is incredible. And though I didn't consult with him, he will autograph your copies. [Laughter]

JEFFREY FUHRER. That only diminishes the market value.

EILEEN MAUSKOPF. No, but it's an incredible book. I read it, and, really, it's incredible. And the second thing I want to say is, one of the things that I really appreciated about—on diversity. Okay. On diversity, so—This is really tangential, but I want to say this because it so might be about society. I'm a practicing Orthodox Jew, which means that I don't work on the Sabbath. I never, ever, ever had a problem with the Fed making me come in or making me violate my practices. And I remember this. There were two events about this. One, I was on loan to government—Fiscal Analysis that year for a year, and we were doing a study on health costs.

And my responsibility was to compare benefits and costs of the U.S. versus European countries' health systems. And then we present—if Louise is still here. Is Louise still here? Is she in? Well, we met with the Chairman once about that, and I, of course, was praising at that time the national health system in the U.K., which, unfortunately, isn't so good today. But I remember the Chairman said to me, "Eileen, are you a Marxist?"

And I thought, "Well, what am I going to say—'No, Mr. Chairman'?" And then it was a Friday afternoon, getting close to—and it was an embarrassing thing to be called a Marxist. I don't know why, because maybe I really was. Who knows? [Laughter] But that was irrelevant. But it was getting close to sundown, and I knew I had a 40-minute commute.

[break in audio]

_______ this because he called me a Marxist. And, Mike, you might have been in the room then. I just remember saying, "No, I observe the Sabbath." Now, when I left the Fed, I went to teach at Hopkins' business school—the graduate school. I lasted there two years because they kept assigning me classes that met [break in audio] and I had to go and kiss up to the department chairman to say, "Look, I can't teach Friday evening."

And they didn't go out of their way to help me. But never at the Fed did I run into a problem like that. And I would say there aren't many institutions that will respect your beliefs like that. And I just want to praise the Fed for that and the diversity, and just MAQS needs a little bit more in the way of female representation. [Laughter] But other than that, no problem. Jeff's book—remember Jeff's book.

WILLIAM WASCHER. Other questions?

LUCAS MOYON. So I had a question. Several of you guys touched on keeping the division nimble throughout your tenure as a leader, and so I was wondering—how did you do that even in the normal times? Stacey, you kind of mentioned the innovation that came out of the pandemic when all the normal models weren't working, but how—you know, there's always innovation happening—and even in the normal times, how did you keep models cycling in and out, and how did you keep innovation flowing with the economists?

DAVE STOCKTON. Is that your question?

STACEY TEVLIN. Oh, I thought it was for everyone. Go ahead.

DAVID WILCOX. We're all putting our heads down and hoping the division director will take this question. [Laughter]

DAVE STOCKTON. So a couple of things. One that's been talked about over the three days is having work collectively—and not sort of silo things. We had all those organization charts that came up the first or second day, and it looked like—I always told people, "That's not how the division is run." Yeah, we have boxes, and we have section chiefs, and people are in the boxes, whatever, but one way to think about it is just constantly to be thinking about forming the best team you can to solve a particular problem.

And sometimes we did shape those boxes around the people that would be most productive and contributing to a particular area. Sometimes those boxes were created because we needed to provide leadership opportunities for people that we saw had potential. So I'd say, don't think about bureaucratic—try to break bureaucratic inertia. And I think—was it Lebow's presentation with all the changing boxes?

So that shows, I think, in a pretty clear way that we have been nimble over the years. It's not like you look at the organization chart of 1993 and it has any resemblance to 2003 or 2013 or 2023. So it is part of a cultural-management view that you can break glass when you need to, and you should do that.

STACEY TEVLIN. So part of the reason I didn't think the question came to me is because you said, "What did you do during normal times?" And I don't think I actually had any normal times. [Laughter]

DAVE STOCKTON. You had a couple of months.

STACEY TEVLIN. But I think one thing that's important is creating a culture where it's not the end of the world if you mess up or get it wrong, by helping people understand that we're going to be wrong in forecasting—we're going to be wrong in a lot of things.

You're going to do a major project, and the results are just going to turn out terrible. And that just happens. And that's experimentation, and that's economics. And so I think that's one of the things that we as leaders can do to help create a place that is able to be nimble and responsive—is make it be okay to sometimes fail.

WILLIAM WASCHER. Anybody else? Mike?

MIKE PRELL. I'd just like to make one little observation about how this place is different from other places. I attended, just around the time of the Kuwait invasion, as I recall—I think I was away when that happened—I came back because I had to get at the Greenbook. But be that as it may, I was exposed to people in other parts of the government there, and I will say, there is a big difference between the Fed and others.

We aren't under the appropriations process. One might also say that we print money. Now, obviously, I know I went through more budget rounds than any of you folks did, and there seemed to be constraints. But in the end, I think it makes a really big difference. Now, I don't know whether, given the financial performance of the Fed in the last couple of years, anything has changed—the budget constraints are any tighter.

But I was seriously impressed. Another thing I was exposed to on that occasion—this was at the Kennedy School, and I won't name the name, but you might know who it is. We had a few lectures on leadership, and this particular person was quite interesting, but he was a very strong proponent of the view that leadership is not associated with rank.

There were a number of military people in our group, and he just lit into them—really. It was disgusting behavior on his part, but it was a way of making a point, I guess, that he saw. And his notion was, essentially, hierarchy has nothing to do with it. When a group gets together to work on something, anyone can be a leader by trying to help the group get towards a good end result.

And I think that's a worthwhile thing for anyone who's in a management—that resonated with me. I don't know whether I ever behaved that way, in fact, but, ideally, I would have at least tried. And I think that's something that is important to keep in mind—not just in any given meeting, but more generally—and give people the opportunity to take on responsibility.

I think there is a tendency on other people that I observed over the years at the Fed to not delegate sufficiently. I delegated quite a bit—mainly, perhaps, because I didn't know anything and I knew all these other people did. And why should I interpose myself between Carol Corrado and the Chairman when they're working on some project that was utterly esoteric to me? But I think that's another principle that managers here ought to keep in mind.

WILLIAM WASCHER. David Wilcox?

DAVID WILCOX. We're over time, so I'll cede.

WILLIAM WASCHER. Yeah. Dave?

DAVE STOCKTON. Okay. I think I've got an appropriate final remark here, which is, one of the lessons I took away from the crisis is that sometimes cocktail hour is better than the sessions. [Laughter] They're more important, one, because during the crisis, you did need a drink now and then—but actually because the personal relationships that you developed either at international meetings or meetings with other government agencies really became important during the crisis.

You could pick up the telephone and call the chief economist at the Bank of England and find out what they were doing. And so I would encourage all of us to grab a drink, talk a little bit, find out what you've been up to, and maybe pass around a few telephone numbers—if anybody uses telephones anymore.

WILLIAM WASCHER. Very good. Yes.

UNIDENTIFIED SPEAKER. Just text messages.

WILLIAM WASCHER. So I've been here long enough that I know that being research director is an extremely difficult job. You've all done it very well, and I also know that R&S is better for your leadership. So I want to thank you for that and also thank you for sharing your thoughts on the panel. So let's give the panelists another round of applause. Thank you. [Applause]