Thank you so much. It is a tremendous pleasure to be here. Marina was just asking how I was liking the world of the Council of Economic Advisers—it is one of the most thrilling, exciting places I have ever been, and I think part of that is the fact that I have to move so rapidly between very disparate issues. That is both a challenge and an excitement.

So what I wanted to do was to take this talk as a chance to step back a little bit and to think about the role of the Council of Economic Advisers. It gave me an excuse to read what a lot of former chairs have written about the Council of Economic Advisers, and I thought after I read it that it was both very helpful, and that I was somewhat glad I hadn’t read it right before I came in. It allowed me to come in with fresh thinking, but I think there are some ways in which they all paint the same picture in the sense that the Council provides the President and senior officials with objective advice based on the principles and tools of economics. The other thing that I found very interesting is that many of them mention the fact that the Council of Economic Advisers looks after the national interest by considering how policy impacts societal welfare in a process dominated by the views of interests, usually called special interests, and many remarked how the Council of Economic Advisers’ special interest was the national interest.

What I’ve found interesting about this is that it helped me understand why I sometimes face challenges in my job that I hadn’t quite recognized before. It always seemed obvious to me that the national interest is the interest, and I’m learning over time that there are many interests but I’m standing fully behind my job at the CEA in trying to figure out what the best thing to do in terms of maximizing societal welfare is.

This description of the Council still remains true nearly 20 years later. And many of you, of course, have spent time at the Council—the structure has largely remained the same. The Council is comprised of a Chair and two Members, a staff of senior economists, professional statisticians, a director of forecasting, and junior economists. The Council members and senior economists typically come for a short spell in government from academia or a think tank, a model that former chair Joe Stiglitz described as “citizen-bureaucrats.” While sometimes clunky, this citizen-bureaucrat model does facilitate the Council’s role as an effective conduit between the research community and the policymaking process. And the Council continues to evaluate decisions in terms of the overall impact on welfare.

So what has changed?

I think the biggest thing that has changed is technology. And that’s not just a change in the
Council, rather it’s a broader change that we’ve seen in the profession—the Council, of course, has reflected this change.

The economics profession is in midst of a revolution. We’re becoming a more empirical field. Rather than just theorize about the effects of policy, we turn to hard data to tell us about how the world really works. This revolution is the result of technological change—it’s given us an explosion of data and, importantly, the computing power with which to analyze it. In short, there are now opportunities to analyze public policy in a way that our predecessors could only have dreamed about.

Those opportunities make research more connected to reality and to policy. In turn, our deeper connection to reality makes us as economists more accessible, more relevant, and actually more central to the policy debate. Implicit in this shift is the hope that empirical evidence will improve our understanding of government programs and the economy.

Now, while this change is impacting all of economics, I think it’s a particular boom for microeconomics. In reading many reviews of what the Council has done, micro has sort of been, shall we say, the Cinderella in the family. And I say Cinderella on purpose as in the ignored stepchild who I think is rising in prominence with our ability to do more analysis. Now, hopefully many of you will disagree with that and say that the former chairs had a bias when they wrote up their reviews of the Council of Economic Advisers.

But I do think that what has occurred is a notable shift in the amount of applied work that we are doing. The work and the staff of the Council have shifted along with the economics profession. Our junior economists are no longer only advanced graduate students, but include computer-savvy undergraduate economics majors, following the full-time RA model that many empirically-oriented economists are using to crunch literally millions of data points. And our staff economists have noted ruefully that they are expected to conduct research at the Council that a few decades ago would have easily earned them their dissertation. They are also expected to do this research in a few short weeks, a month or two if they are lucky. This type of sophisticated analysis of large-scale datasets in a brief time is, I think, one of the advantages for graduate students spending time at the Council. Not only are you exposed to an enormous range of ideas but you actually learn how to get them done and get them done quickly.

The explosion of empirical economics has also increased the number of competing analyses that are relevant to any particular public policy problem. This explosion represents both an opportunity and a caution for policy makers and the public.

The caution is becoming obvious: there are conflicting studies on many important policy issues. I think we see this across a range of fields, not just economics. In a field where I know very little—health—the most important advice for policymakers is to understand that a given research result should not be thought of as either right or wrong but as a guide that should shift one’s thinking. The question is: how far? We’re informal Bayesians, and to us the question of how far to shift our views depends on both the precision of our priors—that is, how much we already knew about the issues—and the precision of the new signal, which is largely shaped by your interpretation of the credibility of the research design.
The challenge for the Council and for others trying to inform policymakers about research is that policymakers tend not to be Bayesians. The Council’s job is therefore to bring Bayesian updating to policy makers.

The opportunity is that the proliferation of studies truly does improve the evidence base available to us, making it easier for us to make the case that policy should be guided by robust research. For the Council of Economic Advisers, this explosion in empirical research and in the tools available to scholars has deepened the value of our role as the conduit of research to White House senior advisers and to the President.

Let me now turn to giving you some concrete examples of what CEA does, and how I think this revolution has caused us to tweak what we do.

The CEA is required by statute to write an Economic Report to the President each year. The statute says that the report should “set forth . . . current and foreseeable trends in the levels of employment, production, and purchasing power . . . and a program for carrying out the policy” to promote "conditions under which there will be afforded useful employment for those able, willing, and seeking to work." In most years that I have looked through the ERP, it has attempted to do more than that and speak to the broader policy debate that is going on. I think one of the things that has changed is the rapid timeline under which things are moving; the technology available to us means that we can release reports on a more timely basis and feed into the policymaking process in a way that provides more timely analysis on economic policy.

So we’ve recently begun reconsidering how best to produce the economic report, and if you look at the most recent year—the 2014 Economic Report to the President—you’ll notice that several of the chapters have been previously released as reports that fed into a more timely aspect of where the policy cycle was. The ERP, to me, serves two really important roles: it provides a record for what the administration was thinking and doing at the time, and it also feeds into the real-time policy process.

This more continuous model of releasing chapters, I believe, better serves that latter purpose. To give you an example of one of those chapters, this past January marked the 50th anniversary of the announcement of the War on Poverty, something Sheldon made sure I understood clearly as I went to the Council this past summer. Walking into the Council with a President who is interesting in thinking about poverty and inequality, we saw as one of our jobs making sure senior advisers understood that there was a broader historical framework to think about and that there would be questions, naturally, raised as we got closer to that anniversary: how good of a job have our government programs done? You think 50 years later it would be an easy question to answer—whether or not our government policies have reduced or not succeeded in reducing poverty. It turns out, actually, that it is not an easy question to answer. There is either a simple, or arcane, perhaps, reason which is that our official poverty measure excludes almost every poverty-fighting program that we have. So if you look at the official poverty rate and use that as a statistic to measure our tools in fighting poverty, you’re failing to understand that that measure, in fact, excludes our very tools.
What the CEA really wanted was something that seemed like a simple concept. What would poverty be if there was no government—market-based poverty? And what is poverty once we put the government programs on top? We worked with our senior economists and asked, “How are we going to answer this question?” Jordan Matsudaira, a very smart senior economist who went to the Ford School, said, “I cannot answer this question on my own in the next couple of months. This is a big idea question.” He went out and talked to academics who worked on this issue. And he discovered a team of academics who were trying to extend the Supplemental Poverty Measure which does more to include our policy programs as measured back in time. But Jordan said to them, “That’s great. I’m really glad you’re doing this work. The problem is, if we want to say something about how effective our programs are over time, supplemental poverty measures are quasi-relative. So as we go back in time, we’re shifting the goalpost. And if I use your measure to compare how poverty, as measured by the SPM, is today compared to 50 years ago, I’m still going to get something that does not tell me whether our programs work or not.” So he worked with them and came up with the idea of creating an anchored version of the SPM that is non-quasi-relative. These researchers came in and presented to the overall administration. They worked with our team and released a paper that I hope they felt was better targeted at how they could influence the policy debate, and we released a chapter which was able to explicitly try to answer the question of how much public policies have reduced poverty. We were able to release that in time for the 50th anniversary so that we could feed directly into the debate that was ongoing. Let me say that we did spend months—not weeks—on this project, but we still spent way less time than academics would have.

Let me give you one other example that I think really illustrates the modern era of economics. The policy team and senior officials inside the administration were grappling with whether the President should raise the minimum wage for federal contractors. There were a lot of questions: what would happen if we raised the minimum wage for federal contractors? How would this impact employment? How would this impact productivity? How would it impact the cost to the taxpayer? Why I think this example really illustrates the modern era is that, of course, the first thing we did was what CEA has always done—canvas the literature. We had many people who were reading a full range of literature, not just on minimum wage changes, but also on living wage ordinances and changes in federal contracting pay, and providing us with a summary of what we know. We took a look at all of the many studies that had been done to see what they suggest the employment effects of raising the minimum wage to be. And then, we did our own empirical research. It turns out there are federal dollars spent in every single state and every state has raised its minimum wage—what happened to procurement as each state raised its minimum wage? Now is where I talk about something that not long ago would have helped someone gain progress on his or her dissertation. A very nice piece of work showed that there was zero effect on procurement costs in a state following its raise in minimum wage.

So pulling together existing research, doing our own primary research, and doing our own detective work on data—a natural question you might ask is, how many people are there working for federal contractors that receive minimum wage? That data does not actually exist—we don’t collect that data. That’s why I talked about data detective work, developing models and downloading federal contracts and trying to figure out what kind of work these people do, what city they are in, and what’s the likelihood that they are being paid the minimum wage given other people doing that kind of work in that kind of town. This overall analysis doing primary
research, investigating current research—this is the kind of thing that, I think, is only possible in the modern era where millions of data points are at our fingertips, enormous amounts of computing power are at our fingertips, and frankly our students have all been better trained coming out of undergraduate programs, coming out of MPP programs, coming out of first or second year of graduate school, to use econometric programs to do the kind of analysis to help us shed light on these issues.

Now, beyond the kind of issues that are feeding directly into the policy decision, the Council keeps abreast of new economic literature on topics that might be important for policy making in the future and where the profession stands on critical issues. Maintaining a close connection to academia is useful here too, as we are able to offer advice on new policy suggestions that are grounded in cutting-edge work. For instance, we are regularly looking at the newest work coming out of NBER and for information that we want to make sure policymakers know about—not related to any specific policy, but in the back of their heads as they are trying to understand how the world is changing. We also invite prominent scholars to discuss their work, and in recent weeks have enjoyed sessions with Thomas Piketty, Bob Hall, Atif Mian, and Amir Sufi, to discuss their prominent work in person.

I think it is really important to emphasize that the White House is always interested in policy recommendations, even if they can’t be readily implemented. Some policy ideas may seem unrealistic at first, but as we’ve seen in the past, policy recommendations that flow out of research can eventually become common sense approaches to policy. For instance, as many others have noted tradable permits and spectrum auctions were once only academic exercises and the CEA was at the forefront of saying that these may actually be real-life policy solutions. By continuously beating that drum, the world eventually moved towards that.

As the world is changing, there is greater potential and certainly greater opportunities for CEA to engage not only with inside the administration but also with policymakers outside of the administration and to reach a more general audience, whether it’s journalists or influential advocacy groups. And so CEA now engages in talking to the broader public much more directly. Again, technology holds the key to the CEA making fuller use of modern media platforms—both Jason and I have Twitter accounts, and I have, many times after the employment report was released, answered people’s detailed and nerdy questions about the employment report on Twitter in order to reach out to a broader audience outside of the administration in real time.

While connecting economic researchers and policymakers is one aspect of CEA’s work, the Council also aims to support initiatives that provide informed policymaking that is consistent with best practices in empirical research.

And while I’m cognizant of my limited time here, I felt that it would be remiss if I did not talk a little bit about the movement to randomize controlled trials throughout all of government and the role that the Council is playing to promote and report that. This idea of randomized controlled trials as being able to influence policy is, I think, permeated throughout government. This past year in our most recent Economic Report to the President we included a chapter on the role of evaluation, and every agency was excited and interested in participating. Our biggest problem
was cutting out the many examples that each agency wanted us to include about the things that they were doing to try to make more informed and better policy decisions.

So working together with the OMB, the Council has helped improve the infrastructure for conducting this kind of research on policies. One of the goals of our chapter was to provide more of a blueprint for the people inside the agencies and inside the government to how to do the evaluations, what they should be thinking about, what an example of success is, and what there is besides randomized controlled trials as the gold standard. The role we’re playing here isn’t just that of an economist advising the President and senior officials, but also that of an economics professor to the broader federal bureaucracy. And again, I think our mandate in the national interest is what leads us to reach out and help agencies in whatever way we possibly can.

The last thing I wanted to say is that some people take a look at the empirical evolution in economics and sometimes mistakenly think that the shift towards a more empirically grounded economics means theory is less important—I think this is just wrong. And so every time I talk about this I want to make sure to get that out, because I think that what is happening is not that theory is less important; it is that the role of theory has changed. When facts were rare, we used theory to fill in for facts. Today, facts are abundant. We have too many facts. And we use theory to help us weed out facts and to give us a set of tools to identify empirical studies and verify results that are unlikely to be true.

Let’s return to the example of research on the minimum wage. As I said, we took a look at as many of the results in literature as we can—I think one of the lessons of how theory weeds out facts is really apparent if you look at a scatterplot of the impact of minimum wage on unemployment, because it has a huge left tail and no right tail. This is evidence of publication bias—it’s probably sensical publication bias. If I publish a result that tells you that the greatest way I can increase employment in my community would be to raise the minimum wage and that would enormously boost employment, no journal editor is likely to believe that is true. Now, if instead I produce a result that says minimum wage has a negative impact on unemployment, those results are more likely to end up getting published.

But I think this, again, reminds us of the role of the Council and other academics within the government about Bayesian updating, and thinking about the results we have in front of us and what they mean. Every time we, as a CEA, produce that scatterplot, I always get a few people on Twitter who say to me, “Yes, there still are all these negative effects on unemployment. Look at these estimates on the left hand side; there is none on the right hand side.” It’s useful to understand that those have been sensibly weeded out. But I think in addition to thinking about the fact that observations are thrown away because of the fact that they don’t match our theory, the more important role now in the interaction between theory and empirics is the growth of behavioral economics. The growth of behavioral economics depends on data to reveal to economists and psychologists the systematic ways in which people make mistakes. Without evidence, economists had known that people make mistakes and sometimes, people forget this. Economists did know people made mistakes. We just assumed these mistakes were random, and we didn’t have any reason to believe that they were systematic. And so, on average, people made calculated rational decisions. What data is helping us understand is that there are ways in which people make systematic mistakes. This revolution in theory coming out of the revolution in
empirical science is, I think, very important for policy makers. The CEA needs to help policy makers understand what this means. What is the role of policy in helping people in particular areas where we now know that they make mistakes? And I think this has opened up a whole new type of research for us to be paying attention to. We should be thinking about how we can inform the policy process.

So let me conclude by saying that this Administration has really been dedicated to building a smarter, more innovative, more accountable government, and it has been focusing on integrating research into policy. In fact, I just left a meeting where the President of the United States attended and one of the cabinet members talked very excitedly about working with the chief statistician of the United States to make sure that we were going to get the data that we needed. This idea that we have to know what we are trying to do and be able to measure it is at every level of government now. Many agencies and offices in the White House, including the Council of Economic Advisers, are helping to make research more prominent in the minds of policymakers and are helping to set an evidence-based agenda to improve government performance.

The Council’s role in this is a continuation of a long-standing model that has been successful across many administrations. While our approach is changing somewhat with the times, the fundamental goal—looking out for the national interest by bringing rigorous economic thinking to matters of national importance—is resolute.

The revolution in economics has increased both the opportunities and the challenges for economists in policy. CEA is happily embracing both.