

**Fed Challenge Winner Q&A: Dartmouth College**  
**November 9, 2020**

JEAN DURR. So thank you, judges, again for your time. And if you can just introduce yourselves, that would be great.

THOMAS WALSTRUM. Sure, I'll turn on my video. Hopefully, you can -- I can -- you can see me while I'm talking and introduce myself. Yeah. So I'm Tom Walstrum and I am an economist in the regional group at the Federal Reserve Bank of Chicago. And it's my job to keep track of the Midwest economy for our president, Charlie. So I -- actually, it's changed a little bit since the pandemic started, but we -- there's a regional memo that I write that goes to him. We've been spending a lot of time in our group talking to business leaders throughout the Seventh Federal Reserve District to just keep track of what they're -- what they're seeing on the ground. A big part of that -- my job is talking to people whose -- are boots on the ground workers or business owners and figuring out and writing the Beige Book is another duty of mine. So with that, I'll turn it over to Erik.

ERIK LARSSON. Hi. Good morning, everyone. My name is Erik Larsson. I am a former College Fed Challenge participant myself many, many years ago. So it is a great pleasure and honor to be here with you all this morning. I know how much work goes into your presentations and everything that you've done to get to this point. So first off I just want to recognize that and say it's a great pleasure to meet all of you virtually, and to be able to do this through a computer given the strange times that we're in. I think the College Fed Challenge is a great program, I'm really passionate about it. It was a big part in landing me my first job at the Board of Governors. I was a research assistant for a few years and then I stayed on full-time as -- I function mostly as a data scientist these days. I work in a group in the Monetary Affairs Division that supports the

FOMC. And so a lot of what I studied in College Fed Challenge is very real to me today in my day-to-day, so it was great to watch your all's presentation and I look forward to learning a little bit more through this Q&A session.

JEAN DURR. Thank you judges for your time. If we're ready to get started, we will start the timer. Students, judges, are you ready?

ZACH OLSON. Could I share my screen? Is that okay?

JEAN DURR. Yes.

ZACH OLSON. Okay.

JEAN DURR. Okay. If we're ready to get started, we will start the timer.

THOMAS WALSTRUM. Erik, you go first.

ERIK LARSSON. All right. Sounds good. So my first question is, the FOMC released a new statement on longer-run goals and monetary policy strategy in August 2020. That new statement was the product of an 18-month long review of monetary policy strategy, tools, and communication practices that included "Fed Listens" events around the country. The new statement makes changes to the language describing both dual mandate objectives. Why does the FOMC now describe its maximum employment goal as, quote, "broad-based and inclusive," end quote, and say that its, quote, policy decisions must be informed by assessments of the shortfalls of employment from its maximum level, unquote?

TENCH COXE. Yeah. Of course. So this is a really important question. Kind of like you said, this comes directly out of the Fed new guidance. And so what we're talking about specifically is the labor markets and the specific change in language was from maximum employment from full employment. This kind of comes as we're speaking to the need to look at a broad range of indicators in order to have a comprehensive understanding of the labor market.

And so part of the study -- this is a really interesting study from San Francisco Fed President Mary Daly. And so, kind of, the rationale behind the study is that an economy where the unemployment rate falls below estimates of its long-run level can actually yield outsize gains for some women and minority groups, according to that study. And so they actually did some research and found that when unemployment fell to 4.1 percent as opposed to previously thought 4.4 percent long-run unemployment rate, that's exactly where the underrepresented community labor market started seeing significant outsize improvement. So for example, one set of results showed that when unemployment rate falls below its estimated long-run level, Black women and Hispanic men continue to see declines in unemployment of a greater magnitude than their White counterparts with the multiplier that increased as the overall unemployment rates fell.

UTSAV JALEN. I can build off that by mentioning two additional things. The first is that, to some degree, also in response to the current pandemic which is a very unique shock in its ability to disproportionately affect certain industries and certain groups such as low-wage earners. And due to those disproportionate effects, the Fed has had to take, yeah, a more inclusive employment mandate into consideration. And the second reason for doing this is what Tench already mentioned, which is once again a lot of minority groups generally start seeing job gains toward the end of the expansion cycle as we started to see after 2008 and 2019, and we want to be mindful of that.

TENCH COXE. And so, yeah, if I can just cap all that off, though, one thing that's been pretty interesting is that the Fed has found that it's able to keep rates very low without actually seeing any negative impacts to inflation. And so part of what that means is that the Fed is able to feel comfortable heating up the economy to such a degree to where we're trying to get maximum employment as opposed to full employment because the negative consequences of things like

inflation. We haven't really seen those consequences at all in the past ten years, whereas we do see some of these benefits of trying to get the employment level -- unemployment level as low as possible. You do see some of these very positive benefits like an increase in employment for some of these minority and women's groups.

ERIK LARSSON. All right, Thank you. Unless there are any other comments from the team, I'll pass it over to Thomas.

THOMAS WALSTRUM. Okay. Hearing none, I'm going to ask a question. And let's see. So yeah, so I -- just an FYI. These are questions where I ask -- the first two questions we're asking you are for -- are ones that are being asked to all groups. And so after that we'll get to ask some questions that are specific to your presentation or just specific to us. So here's a second question that all groups are being asked. It's -- it is -- the FOMC stated that it is, quote, committed to using its full range of tools to support the U.S. economy in this challenging time, thereby promoting its maximum employment and price stability goals. With the federal funds rate near zero, please discuss other monetary policy tools that the FOMC could have used, or could use, to address additional adverse shocks to the economy. If applicable, please discuss the relative costs and benefits of each tool. That's the question.

UTSAV JALEN. I can just start by giving a brief overview of unconventional monetary policy tools that we have to undertake after hitting the zero lower bound. Specifically, in response to this pandemic, the Fed has engaged in quantitative easing. It has engaged in forward guidance. And it has monetized established multiple liquidity facilities to help make financial conditions more accommodative. And my teammates can start by delving into each of them.

KIRA KOEHLER. Yeah. I can start off by -- first of all, the Fed has recently announced that it will be engaging in flexible average inflation targeting in response to its persistent

undershooting of inflation. And, really, the reason we've done this is because there were two characteristics of our previous strategy that were extremely flawed. The first is that individuals, households, and businesses perceived the two percent inflation target as an upper limit. And through pure logic, this would really lead to less than or equal to two percent inflation over time. The second risk is that preemptively raising rates without signs of inflation will place our faith in the traditional Phillips curve relationship, which may no longer exist.

AYAN AGARWAL. Yeah, I'm happy to touch on the forward guidance piece. So the forward guidance was a tool that central banks are using to provide communication to the public about the likely course of future monetary policy. And so when these central banks provide forward guidance, businesses, consumers use that information in making decisions about today's funding and investment. So we've seen forward guidance as an effective tool to influence future economic conditions. In terms of the benefits and some of the drawbacks, the pros are that it allows the Fed to influence longer term interest rates through expectations. But, having said that, there is what's called the Forward Guidance Puzzle where there is a trade-off between clarity and flexibility, where issuing stringent guidance limits the ability to deal with future expected shocks. And so the longer -- the stronger and longer and more comprehensive the forward guidance is, the greater probability that a central bank might be tempted to renege on it, which reduces the risk of forward guidance, and so one of the big drawbacks of forward guidance is the threat of permanent credibility damage.

ZACH OLSON. And I'm happy to touch on liquidity facilities that Utsav mentioned. So back in early March when the pandemic -- when the fallout from the pandemic first began, we saw an incredible flight to safety in the financial markets. Credit was hard to get for many borrowers in need. Spreads widened and issuances fell, so the Fed established some of its 13(3)

facilities, including TALF, the commercial paper funding facility, the Money Mutual Market Liquidity Facility, as well as others. And this really helped to backstop credit markets, and continue the flow of credit to borrowers in need. So I'll just talk about the mutual market -- Money Mutual Fund Liquidity Facility as an example. So we saw a large exodus of funds from these mutual funds and this facility allowed these funds to borrow money from the Fed so it can meet its redemptions and it essentially helped to guarantee to investors that their redemptions would be met. So it helped to limit the flow of these redemptions and helped to continue the access of credit to borrowers in need.

UTSAV JALEN. Just to cap up the discussion of their financial policy tools, we also used in 2008, which is quantitative easing. Essentially, the purpose of quantitative easing, through issue of course, is agency mortgage-backed securities, treasuries, and even corporate credit for COVID is that we're going to push down the yields on those specific assets and therefore make financial conditions more accommodative for the market participants involved within those assets. And I'm also -- I'm happy to delve into some additional, you know, mechanisms through which QE transmits itself, specifically for the portfolio balance theory, preferred habitat theory, or signaling theory, but some of the benefits of QE is once again making financial conditions more accommodative, but one of the drawbacks is balance sheet expansion which leads -- which makes it even more difficult to formalize policy in the long-run.

THOMAS WALSTRUM. Great. Thanks, everyone. Let me just ask about average inflation as a follow-up. Can you tell me a little bit more about -- I think you touched on it a little bit, but just could you rate a little bit for me, kind of, the costs and benefits of that tool. What's the benefits of moving to that, and what are the potential costs of moving to that new approach?

AYAN AGARWAL. Yeah, I can start by talking about some of the benefits of that tool. So one of the big problems recently is that we've seen, you know, since the '90s, inflation on average in the United States has been 1.86 percent. And so, because we're not consistently, like, hitting the 2 percent target, the market has started to price in and expected inflation will, on average, be lower. And so by adopting average inflation targeting, it gives the Fed more room to move and let inflation creep up during times where interest rates are lower and the market is in a recession. And so by giving us that additional flexibility, it also allows the Fed to cut rates further in the case of another drawback. And so it's a self-fulfilling prophecy and really anchors inflation expectations because, if inflation expectations rise, consumers will want to buy more before inflation goes up which creates more demand, which ultimately rises inflation. And the same thing on the other side, if inflation ends up falling.

KIRA KOEHLER. Yes, and additionally, right now we are in an extreme deflationary environment. Since 1990, inflation has averaged 1.86 percent, which is below our target of 2 percent. And kind of one of the drawbacks of flexible average inflation targeting is that you are targeting inflation. And a study by Candia, Coibion and Yuriy, at the NBER, has shown that households inherently have a flawed understanding of inflation. So across all developed countries that they studied, professional forecasters understood that a high inflation is typically associated with higher forecast of output growth, and that's really consistent with demand-driven business cycles and the Phillips curve. But in sharp contrast, households across all countries systematically have the opposite view, that high inflation is associated with worse growth forecasts. So, really, when we are delivering this policy, I think it's of the utmost importance that we speak with clarity, that inflation is ultimately the desired goal that we are aiming for, especially in this economy where we're seeing low aggregate demand, we're seeing a decrease in

government transfers, which is slowing the flow of money throughout the economy. And, with that, we really do hope that flexible average inflation targeting will bring us to our 2 percent goal that we've been aiming for.

TENCH COXE. It's also really important to note that, in flexible average inflation targeting, this means that, as Kira mentioned, we've been in the deflationary environment and not been hitting our 2 percent goal. So, in order to reach the 2 percent average rate –

ROBIN CAPPETTO. This is the two-minute warning. The two-minute warning.

TENCH COXE. Thank you. Yes. Absolutely. So to reach the 2 percent average rate, we have to let inflation go moderately above 2 percent for some time, which does represent somewhat of a risk because getting inflation back under control historically has been a very challenging thing for the Federal Reserve to do in the United States and also to get done globally. So there is a slight risk that if we let inflation get above 2 percent, trying to bring it back down to 2 percent could result in some recessionary or negative repercussions. So it's really important to be on top of letting the rate go above 2 percent and managing it very closely. Hence the risk.

THOMAS WALSTRUM. Thank you very much. Erik, do you want to ask one last question here before we run out of time?

ERIK LARSSON. Yeah. I'll try and sneak one in real quick. So, of course, forward guidance was a big topic of discussion in your presentation and we're talking about this new average inflation targeting regime. So what channels does the Federal Reserve typically use to communicate its policy decisions related to forward guidance, and your tools such as this. What do they use right now and if you've got any -- you know, touch upon any benefits or drawbacks of each communication channel. That would be great.



UTSAV JALEN. Yes. I can start by talking about some of the channels through which the Fed uses forward guidance. So the first channel is that the Fed chair, traditionally, after the FOMC meetings will do a press conference where they take on questions and answer consequences about what was discussed in the FOMC meeting. And they also issue a statement regarding their economic outlook and the state of the economy in general. The Federal Reserve also publishes a policy statement, and they very recently also decided to start doing the Summary of Economic Projections and release that with the policy statement. And lastly –

ROBIN CAPPETTO. Your time has ended.

UTSAV JALEN. I'll just finish the sentence. And lastly, also –

ROBIN CAPPETTO. Thank you.

JEAN DURR. Okay. Thank you again for your time and for your participation in this year's virtual College Fed Challenge. This week or next week you will receive an invitation to the winner announcement which will take place on November 20th at 3 p.m. So please tune in for the results. Also, a press release will announce the winners that day and a winning video presentation and the Q&A sessions will be uploaded to the awards website after the announcement. After that time, if you did not win, we will be in touch about supplying your video and Q&A session. So, again, I'd like to thank you for your participation this year, and good luck. And we're done! Thank you so much.

LAURA SHIPLEY. Thank you Judges. Bye, bye.

ROBIN CAPPETTO. Thank you.

ERIK LARSSON. Thank you, everyone.

LAURA SHIPLEY. Take care.

THOMAS WALSTRUM. Thank you, everyone.

JEAN DURR. Take care.