

## **National College Fed Challenge 2023 Winner Q&A (Harvard) Transcript**

**November 17, 2023**

ROBIN CAPPETTO. Welcome to the 2023 virtual college Fed Challenge. We've already read your Team ID so thanks for confirming that. Advisers, alternates, and spectators, please mute yourself and do not show yourself on the video. Team, are all your presenters present and ready to go? OK.

HYUNTAE CHOI. Yes.

ROBIN CAPPETTO. Just a reminder, you don't have any school identifiers in your Webex and we're going to go over a few rules. When you're not speaking it's a good idea to mute so your sound is clear. We are recording today's session for final judging. You may have your slides up that were used during your presentation submitted in October, but you cannot have updated data within. The economy is essentially locked in when you submitted that video. Today, if you verbally referenced updated data, it will not help your team or hurt the team score. That does not do the same. No new slides or data should be introduced within your PowerPoint presentation. In a few minutes, we're going to start the timer and Sophia will say "two minutes" and "end" verbally. This may interrupt your sentence but please allow it. Jose, can you verify we're recording?

JOSE ACOSTA. Yes, recording is confirmed.

ROBIN CAPPETTO. Great. Judges, can you verify you have the two common questions?

LOGAN LEWIS. Yeah.

ROBIN CAPPETTO. Thank you. Thank you again, judges for your time. If we're ready we'll start the timer now.

LOGAN LEWIS. OK. So your first question, and feel free to ask me to repeat anything, is over the past one and a half years, the Federal Reserve has increased its policy rate at a pace that is unprecedented by modern standards. Taking into consideration economic conditions at the start of the tightening cycle, what is your group's assessment of the cost and benefits of such a strategy versus some alternative of your choosing? How would you describe the effects to date?

SAM MEACHAM. A great question. So the Fed began raising its policy rate in March 2022 and it's gone from 0 to 25 basis points up to 5.25 to -- 525 to 550 basis points which you did mention is unprecedented. We generally believe the Fed's pace and level of tightening has been apt throughout even though it's possible the Fed should have started earlier. So the cost and benefits to do this are two-fold. On the cost side, there are recessionary risks and we have seen a dramatic softening of the labor market as a result of this, as well as a tightening of credit conditions that has put stresses on the financial system. And on the benefits side, we have seen a dramatic decrease or a moderate decrease in core inflation and a dramatic decrease in headline inflation, perhaps attributable to that labor market softening. So going forward, we think that the policy rate as it's currently -- as current level is wise, depending on incoming data it may change. And we think that the Fed's main tool overall, this policy rate and alongside communication, that's what it should have been using and that's what it's used.

MEGAN YEO. And just to speak a little more to the cost of this tightening, so we saw that in the period prior there were actually pretty low interest rates which led pension funds and bank portfolios to exhibit a reach-for-yield behavior in which they increased the exposure to duration and interest rate risk. So we saw for instance, in the Silicon Valley Bank crisis earlier this year, when there was very quick tightening, this led to these bank portfolios that were exposed to these risks to actually face significant instability because their asset prices were

devalued. Nevertheless, we have various programs such as the Bank Term Funding Program or the discount window. We think that the Fed also successfully managed to contain this crisis so ultimately, it didn't become a larger crisis in the economy.

BEN WORKMAN. As to the overall pace of tightening, we think that the Fed's sort of approach of being data-dependent is prudent. If you use, for example, a simple Taylor Rule calibration when headline inflation was in the range of 9 percent, it would imply, you know, a necessary federal funds rate to bring inflation back down to target, substantially above 5.25. However, the Fed recognized that one, increasing the federal funds rate is sort of a one-off event would exacerbate financial instability concerns, as Megan mentioned, so that wouldn't be prudent. And two, monetary theory is not always perfect and so, looking at incoming data as it evolved is a more sort of sensible approach. For example, not many economists predicted the labor market dynamics we're seen over the past year where, for example, the unemployment rate has remained relatively constant but vacancies and other demands that measure labor market tightness have come down substantially. And so we think that the Fed's data-dependent approach is warranted.

HYUNTAE CHOI. And to elaborate on the labor supply side, we've seen that LFPR among prime age males and females have risen back up and are actually now above pre-pandemic levels. We're seeing that LFPR also among Black Hispanic workers are -- have recovered significantly and that's been beneficial in our quest to bring labor demand and supply side factors into greater balance. At the same time, when you look at inflation, if you decompose core inflation into its requisite parts, into core services, ex-housing, core housing and core goods, you'll see that core goods inflation declined dramatically. It's actually coming in at 0.1 percent U over V now compared to kind of above 5 percent. When we started the hiking cycle, we're seeing

that core services inflation is still elevated at around 3.5 percent, and we see that as part of the -- reflecting the labor market tightness that we alluded to earlier. And so we'll have to see that come into greater balance for our inflation fight to be over.

SAM MEACHAM. And to quickly wrap that up, you mentioned alternative policies the Fed might have used. We do think the policy rate was the correct way to go, of course, in combination with quantitative tightening which has tightened the financial conditions as well. That could have been the alternative the Fed will lean more heavily on. But those two in tandem seem to have worked well and raising the short-term rates seems to have fed back through the economy in a way that the Fed would have wanted to.

MOHAMMAD MAAZ REHAN. Any further questions before we move on to the next one?

LOGAN LEWIS. Nope.

MOHAMMAD MAAZ REHAN. Great. All right, so since reaching a peak of 7.1 percent in June 2022, the 12-month PC inflation rate that the Fed target has declined to 3.5 percent as of August this year. Many observers and market participants expressed that they were surprised at this reduction and inflation has been seen without the U.S. economy having undergone recession. So I guess two questions here. What would the group say is a basis for this surprise and secondly, does the success in reducing inflation so far suggests to you that reaching the Fed's 2 percent longer-run goal will be easy?

MEGAN YEO. Yeah. Just to elaborate a bit more on the theoretical basis, so if we look at the Phillips Curve where it shows that the relationship between inflation and unemployment, usually to bring down inflation we need to see an increase in unemployment and it could lead to

recessionary risks as well. As Checchetti et al, for instance found that Central Bank [inaudible] inflations often tend to lead to recessions happening as well. However in this case, we saw that because the reduction in inflation was actually brought about by supply side factors, so for example, a paper by Bernanke and Blanchard in 2023 found that supply side, resolving a supply side constraint such as the supply side -- the manufacturing constraints and supply shock that happened during the pandemic, these were the key contributors to the declining inflation. And it has contributed to the so-called immaculate disinflation that we've seen so far. Moving forward however, we think that as the Bernanke and Blanchard paper said, because labor markets will be still tighter than before, we think that this could possibly be an inflationary risk that will be harder to resolve without a recession.

BEN WORKMAN. Even though, as Megan mentioned, most of the reduction in headline inflation that we've seen has come from the normalization of supply side factors, we have seen a substantial decline in core CPI and core CP -- PCE. Why this has happened without sort of an increase in unemployment or more broadly sort of greater indicators of recession we think has a lot to do with the specific nature of the labor market and specifically the Beveridge Curve in the pandemic and post-pandemic period. There's a lot of talk throughout 2022 of the outward shift of the Beveridge Curve and, you know, the increase in  $V$  over  $U$  up to at the high of 2. Since then, we've seen the Beveridge Curve shift back inwards and more broadly, measures of labor demand like  $V$  over  $U$ , like vacancies, like jobs, quits come back down closer to the pre-pandemic levels without an increase in unemployment. One reason for that is that the outward shift in the Beveridge Curve may have been induced by sort of COVID-specific idiosyncrasies. For example, there's a recent NBER working paper released in October by Barlevi et al that posits that the increase in on-the-job switching as measured by the quits rate increased labor

reallocation and decreased matching efficiency, which shifted the Beveridge Curve outward. As we've seen the on-the-job switching and become less prevalent since 2022 that would imply a reduction in vacancies and therefore, reduction in labor market tightness and a lowering of nominal wages which we've seen for example, in the October jobs report, we saw average hourly earnings coming in at 2.5 percent month over month annualized which is consistent with the cooling labor market and thus, cooling core inflation.

SAM MEACHAM. As Ben and Megan mentioned, this has mainly been driven, we think, by supply and demand renormalizing, both overall in the real economy with supply shocks declining. Thus, decreasing inflation without decreasing -- increasing unemployment as well as labor supply and demand coming into greater balance. Going forward however, we're a bit skeptical that these factors exactly will be able to contribute to disinflation. So, vacancies seem unlikely to be able to come down that much further without some increase in unemployment and supply side factors seem to have kind of reverted to their base effect to the point that we can't rely on more supply side normalization. We're still bullish because we think that incoming housing data which is lagged suggests coming disinflation in the data and we also think that anchored inflation expectations around the break-evens for 5 year out and 10 year out are hovering around 2 percent, meaning the market expects the Fed to get back and we don't expect a wage price spiral. We do think inflation has a risk of stabilizing around 3 if those housing factors don't really come through. And that's why the Fed needs to be data-dependent going forward. And if it sees inflation rising or stagnating, it needs to be willing to raise its policy rate and further tighten the economy.

HYUNTAE CHOI. And to sum it all up, when you have this Phillips Curve that's augmented with inflation expectations or with labor demand side factors to measure labor market

tightness rather than unemployment which is the labor supply side factor, you do see this kind of linear relationship tradeoff between having a tighter labor market and having higher inflation. And so going forward, we're going to have see labor demand side factors come into better balance with supply. And I alluded just earlier where we see increases in LFPR and labor supply from net immigration as well as work-from-home dynamics, making work more available for people, those certainly have helped and we would like to see that continue.

LOGAN LEWIS. You mentioned supply side normalization and the goods market. Do you think there's demand side normalization on the goods market as well beyond monetary-policy-induced demand changes?

HYUNTAE CHOI. Yeah. So we've seen a lot more normalization in demand in durable and nondurable goods. I mean, recently we've seen in the recent PC report that demand for services which has been the main driver of consumption this year, has kind of broadened out to durable and nondurable goods again. But in the beginning of the pandemic, you saw a real influx in goods-driven inflation and -- but that's normalized over time. We saw core goods come down from over 5 percent and now it's basically flat year over year. And that's come from normalization of, for example, used cars demand. Now that being said household balance sheets are still very strong right now and there are over \$2 trillion in excess savings. And so that's been a real surprising factor in the economy right now, is why consumption growth is so strong. And so, you know, we think that while demand in goods has normalized, it's not clear whether strong balance sheets would continue fueling growth in the future.

SAM MEACHAM. And to elaborate on that balance sheets and excess savings point, it's just notoriously very difficult to measure excess saving. Many studies show there's trillions left. The San Francisco Fed released a study saying excess savings have been exhausted and

consumer demand shouldn't be driven by those excess -- the excess asset side, the balance sheet for households. So that's a bit of a counterpoint to what Hyuntae just said. However, as I said, they're very difficult to measure and given that excess savings decline is likely the factor on the demand side that's least effective on monetary policy that's most impactful. It remains to be seen whether there's further normalization there or whether consumer demand will stay robust as it's had its kind of long-term steady state level.

MEGAN YEO. And just to add two more quick factors, one factor that may contribute to the further normalization of demand is the reduction in pent up demand from the pandemic where people were -- where we're using -- where people were consuming less during the pandemic were now consuming more. However, that is slowly declining over time as seen by how holiday spending is on the decline for instance. Secondly, the resumption of student loan payments by the Biden administration may also have the potential to temper demand.

SOPHIA PACHECO. Students and judges, you have two minutes left.

MOHAMMAD MAAZ REHAN. Kristin, you're on.

KRISTIN M. DZICZEK. I would like to follow up on the labor market questions. You know, we've had a significantly tight labor market, providing workers more bargaining power and seen real wages increased. One of the outcomes of that is in the organized labor sectors they've been able to win back cost of living increases. Can you comment on a little bit on how you see a built-in cost of living factor tied to inflation and how that will play to inflation going forward?

BEN WORKMAN. That's a great question. So as you mentioned, sort of all canonical, you know, models of worker bargaining sort of indicate that with higher vacancies relative to

unemployment that sort of increase in the expected duration of a vacancy, which makes it more costlier for firms and so they're willing to give employees higher wages, which basically increases worker bargaining power in a period with high V over U. And indeed we've seen for example, with the recent UAW autoworkers strike, workers getting substantial wage gains, for some workers up to 70 percent. In terms of the sort of inflation dynamics, what's important to understand is whether this is reflecting catch-up wage gains or rather sort of entrenched higher inflation expectations that can fuel further inflation going forward. As I mentioned earlier, we've seen nominal hourly earnings come down substantially. And so it's possible that the kind of higher wages that we've seen in these recent sort of high profile worker bargaining arrangements reflect more catch-up wages in response to substantially high inflation we've seen over the past three years, rather than kind of entrenched higher wages going forward.

HYUNTAE CHOI. It's also worth noting that wage –

KRISTIN M. DZICZEK. The question, excuse me, the question was about yes, there's been catch up but now going forward more of them have built in and inflator for cost of living adjustments. So that's the question I –

HYUNTAE CHOI. Yeah. So, you know, we can think about this in terms of wage inflation that feeds into price inflation by raising firms' labor costs. And if we think that wage inflation is driven by kind of changing expectations –

SOPHIA PACHECO. Students and judges, your time is now up.

ROBIN CAPPETTO. All rightee, thank you again for your time and for your participation on this year's Virtual College Fed Challenge. Later this week, you will receive an invitation to the winner announcement on November 17 at 1:00 pm Eastern time. Later that day,

a press release will also announce the winners. Winning video presentation and Q&A sessions will be uploaded to the Board's website after the announcement. After Thanksgiving, we'll be in touch about supplying video Q&A sessions to all schools who participated. Please note we've sent you an invitation for the College Fed Challenge Open House in Washington DC on Friday, February 9 and there will also be a virtual option for this event. This event is for 2023 competition participants. They will be able to network staff, competitors, and judges. It will also feature preparation and orientation for the 2024 College Fed Challenge. On behalf of the Board's economic education team, thank you for competing in the Virtual College Fed Challenge and have a great remainder of your school year. Thanks all.

MOHAMMAD MAAZ REHAN. Thanks for participating. Good job everyone.

BEN WORKMAN. Thank you.

MOHAMMAD MAAZ REHAN. Nice to meet --