Transcript
FedTalk: Lowering Inflation: The Who, What, and How
Federal Reserve Bank of Cleveland
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Presentation

Panelists:

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Brent Meyer, Assistant Vice President and Economist, Economic Survey Research Center, Federal Reserve Bank of Atlanta

Moderator:

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Michelle Park Lazette:

Good afternoon and thank you for joining us. Welcome to today's *FedTalk*. My name is Michelle Park Lazette, and I'm a marketing strategist in communications for the Federal Reserve Bank of Cleveland. It is my pleasure to kick off today's *FedTalk* session on lowering inflation, the who, what, and how. *FedTalk* is the Cleveland Fed's speaker series in which we share research that is relevant to our community. Past topics have covered such subjects as the racial wealth gap, access to labor markets, and financial literacy. You can find *FedTalk*s on our website, clevelandfed.org, and also on our YouTube channel.

I think there's no question that today's topic of inflation is both relevant and timely. Many of us are feeling the increases of the items that we buy and some generations, mine included, haven't experienced in our lifetimes inflation this high.

A few housekeeping items before we begin. During this event, your microphone and your camera are disabled. Please ask questions, type and submit your questions to our panelists in the chat box. And in the case that the Zoom meeting drops, please use the dial-in information provided in the email invite.

Today we have with us four panelists. The views they share are their own and not necessarily those of the federal reserve banks for which they work or the federal reserve system. We have Ed Knotek, senior vice president and director of research for the Federal Reserve Bank of Cleveland, Robert Rich, senior economic and policy advisor and director of the Center for Inflation Research with the Federal Reserve Bank of Cleveland, Charles Gascon, senior

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economist with the Federal Reserve Bank of St. Louis, and Brent Meyer, assistant vice president and economist with the Federal Reserve Bank of Atlanta. So let's get started with a level set. Rob, I'm going to ask you to tackle this question and it is, what is inflation and what isn't inflation?

Robert Rich:

All right, thanks Michelle. So obviously this is a very important question and I think that because of the higher inflation rates, a lot of people get a little bit confused on what we really mean by inflation. So when we're talking about inflation, what we're really talking about, I think are sort of two conditions to be met. The first is the idea that we're looking at a situation where we have a broad increase in prices across goods and services in the economy. So I know that when people go and they see gas prices going up, they think that's inflation, or if they see a food price go up, they think that's inflation. But I think it's really important here to understand that the idea that inflation is really talking about an increase across a broad range of goods and services.

And then the other part of that is that it's sort of sustained that it's an ongoing sort of process in some sense. So really we're talking about an overall sustained increase in the general price level. Or another way of saying that we're really just talking about of a large quantity of goods and services in the economy whose prices are sort of continually increasing. That's what we really mean by inflation. And again, I think it's really important not to associate inflation so much with a single price or the price of a couple items, but rather if you want to think about it, really a market basket of goods and services.

Michelle Park Lazette:

Thank you, Rob. And as I mentioned as we got started, inflation is the highest it's been in four decades. Rob, can I stay with you and ask how did we end up here?

Robert Rich:

Sure, you can stay with me, Michelle. That's fine. And so the way that I tried to think about how we got here is really to kind of break it down to three parts. And so I think the first thing to do is kind of go back a few years into the start of the pandemic and to simply recognize that the start of the pandemic ... I mean with the pandemic, this was really a phenomenon that we had never had any experience with. And there was a great deal of concern not only in the US but throughout the entire world, that we were going to see essentially a return or have a second Great Depression. And so because of those concerns, we saw both central banks as well as governments respond by essentially doing what they could do to ensure that demand was going to stay very strong and robust.

So here in the US for example, we saw that the Fed cut interest rates to zero. And I'm sure people will remember that under both the Trump and the Biden administrations, there was a lot of fiscal stimulus put in place. So the very first thing to just recognize is the fact that with the pandemic, great deal of concern that the economies were going to weaken, we were going to potentially have a return to sort of a second Great Depression. And so there was a very strong response by central banks and fiscal authorities to sort of ensure there was very strong demand. So that's kind of the first piece of the puzzle. The first piece that I would cite.

The second then is there was a very significant rotation and change in consumer spending patterns. So consumption makes up about 70% of GDP. And so it's a very significant component

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of overall demand. And what we ended up seeing during the pandemic was we saw this very, very pronounced rotation out of spending on services. And by services I mean things like shelter, medical care, restaurants, hotel into goods, things like new cars, used cars, apparel, electronics, furniture. And so that was because essentially the entire service sector was severely shut down because of the consequence of social distancing and also because of the fact that there were sort of other things taking place like lockdowns. So you have this very pronounced rotation out of services into goods spending. So that's part two.

But then we also are aware that there were very significant supply constraints that started hitting the economies and we're aware of the fact that there were bottlenecks and supply chain disruptions, but those mostly took place in the goods sector itself. So if you step back from all of this and think about the sequence of events here we have this very strong push in terms of aggregate demand. Within aggregate demand, you have this rotation out of services into goods, and then you have the goods sector being impacted by the supply constraints and supply conditions hitting them.

And so what you ended up seeing then was the surge in inflation starting in the spring of last year, I'm sorry, in spring of 2021, where you essentially saw the surge taking place mostly in goods prices. And so there was this very pronounced upward increase in goods inflation. And now what we've seen is that while goods inflation is somewhat coming down, we're now seeing services inflation sort of moving up. So those are kind of the three ways that I think about where we ended up with today. And of course, in light of that elevated and sustained increase in inflation, we saw the Federal reserve begin to increase interest rates earlier this year. So those are sort of the three pieces the way that I think about how we got here today.

Michelle Park Lazette:

And that provides the perfect segue into the next question. You mentioned, Rob, that the Federal Reserve began to act increasing interest rates. Ed, I have a three-pronged question that I'm going to lob at you. How does the federal reserve know when to act to lower inflation like that which Americans began to experience in spring 2021? So when does the Fed decide that inflation isn't temporary and is broad-based? What measures does it use to make these decisions as accurately as possible? So I know that's a lot. I can repeat as necessary.

Ed Knotek:

Okay, thanks Michelle. Let me see if I can address all three of those parts. So first and foremost, the FMC wants low and stable inflation. So the FMC has a target of 2% inflation based on a particular price index, which is the personal consumption expenditures price index. And so that's the target, that's the objective. And typically they're aiming for that over the medium term. And so the simple answer and a very, very simple answer is that typically policymakers would tighten monetary policy when inflation is above target and they typically ease policy when inflation is below target. And that's with an eye towards trying to bring inflation back to that 2% objective. But the trick is that you need to be very forward looking when you're making monetary policy because it takes a while for monetary policy actions to affect the economy and in turn to affect inflation.

So the key question is if you see high inflation, you need to try and figure out how persistent it's going to be to account for these lags of policy. And so we typically look at lots and lots of data to gauge persistence. So here at the Cleveland Fed, we have several measures that try to do this. We

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have median inflation and trimmed mean inflation. So median CPI, trim mean CPI, median PC trim, mean PC, the Dallas Fed also produces one of those. So what's going on there with these measures is that we're trying to look at price changes in the middle of the distribution of all prices that are changing and an effort to extract the trend. So some prices are moving up and down by a lot each month, but there typically tends to be a slower moving trend. And that trend persistence is trying to indicate where inflation might be headed once kind of the very near term influences drop out. So that's one measure of trend.

Another typical measure of trend inflation is what's called core inflation, where you exclude the volatile prices of food and energy, not because we don't care about them just because they move around a lot and they can be very volatile, they can be affected by droughts and floods and things like that. And so in order to look for the trend, we sometimes exclude those. And then also there's a lot of other measures out there. So the Atlanta Fed has what's called a sticky price CPI. So that's another way of trying to disentangle what's moving and what's going to be more persistent versus more transitory. There are lots of statistical models out there. There are lots of forecasting models out there. There's a ton of data coming from the Bureau of Labor Statistics, BLS and the Bureau of Economic Analysis, the BEA. And there are many, many ways to slice and dice those data to see how different prices are behaving.

And last but certainly not least, we also look for a lot of anecdotal reports from businesses to see what they're doing, what's going on with their costs, what's going on with demand, what they're seeing in competition, thinking about their profit structures. All that's done in an effort to see where prices are going to go. Now, none of these models, none of these measures is going to be infallible because ultimately what you're trying to do is to guess what's going to happen in the future to inflation. And so of course I think we can all appreciate that the future's hard to predict, it's difficult to forecast.

So just going back to what Rob had said early 2021, it looked like some of the price movements were pretty transitory or very limited to a certain number of goods and services where demand was high and supply was constrained. You kind of fast forward to middle of 2021, you start to see price pressures broadening. You start to see some of the median and trimming CPIs starting to move up, suggesting that it wasn't just these extreme movements and a few indicators, it was starting to broaden. And then at that point in time you started to see monetary policy beginning to respond. You saw first of all, the dialing back of accommodation as inflation was above 2% and seemed to be moving higher. And in the early 2022 you started to see monetary policy beginning to remove accommodation by raising interest rates in an effort to help bring inflation down. So now we're a number of increases in the funds rate later, and we're starting to see basically the opposite. So now we're starting to see inflation starting to ease a little bit, starting to turn down. And so many of the same questions are arising. So how quickly is inflation easing? And most importantly, how broad based is that easing?

And so again, we're looking at these measures of trend. We're looking to see are they starting to turn over? If we look at the median CPI, the trim mean CPI, they've started to level out. Maybe they've come down a touch, some of the PCE measures have come down just a little bit more. So those are positive developments, but it does suggest that there's still a fair amount of momentum in inflation that'll need to be removed for inflation to come back to 2%.

Michelle Park Lazette:

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And Ed, you mentioned the FOMC. Can we take a step back and describe what this body is that is making these decisions on behalf of the Federal Reserve?

Ed Knotek:

Sure. So the Federal Open Market Committee or FOMC is the central body of policymakers at the Federal Reserve that meets usually eight times per year to talk about what should happen to monetary policy with an eye towards trying to promote price stability and maximum employment. Price stability of course, is measured with inflation, and that's where we're aiming for that 2% inflation. Maximum employment is kind of the concept of we want everybody working who wants jobs, but we have to take into account the fact that we don't want too many price pressures at the same time. And those goals can sometimes be aligned and sometimes conflict. And so it's the job of the federal open market committee to make those tradeoffs.

Michelle Park Lazette:

Thank you, Ed. Just a reminder to our audience, we welcome your questions and please drop them in the chat as they occur to you. The next question is one that I will ask Brent to field, and Ed started to talk a little bit about the fact that yes, the Fed monitors quantitative measures such as the CPI and PCE, but it also is looking for qualitative information. Brent, how does the Fed listen to the public and to others about inflation?

Brent Meyer:

Yeah, thank you. Hi everyone. It's good to see all the panelists on the call today and I hope you're enjoying the chat. Yeah, we go beyond economic models and the data that Ed was talking about, the tine inflation statistics, sticky price, inflation statistics, and we really try to get a more wholesome sort of boots on the ground set of intelligence. We do this through a variety of methods including business surveys, trying to elicit what firms are telling us about their cost pressures and price pressures they're facing, how much they're passing through onto their customers. And we also engage in a lot of intelligence where we're chatting face-to-face with firms in households to dig in and more fully understand the set of circumstances that they're dealing with and how they are planning on responding. And that kind of feeds into this forward looking component, trying to figure out where inflation's going.

And yeah, our track record's not fantastic here by any stretch, but a lot of times firms can give us, in households can give us a forward looking component in what they're telling us. For example, early in 2021 when we saw these supply chain bottlenecks and disruptions broaden out some labor disruption and firms who were having that challenging time finding fully staffing their firms, we saw that they were telling us, "Hey, we anticipate these price pressures to last for some time." And as we went through 2021, it became clear as the data was broadening out and showing a much more, a broad based set of inflationary impulses that firms were telling us this is going to stick around, this isn't going to be transitory in a sense, this is going to be something that we're going to have to respond to over a longer time period. So that helped us, at least that helped us at the Atlanta Fed in particular and at other federal reserve banks to think more deeply about the situation that we were going to be in over the next year, year and a half.

Michelle Park Lazette:

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Thank you, Brent. Okay, so the Fed gathers the quantitative information and the qualitative information and decides to act. What exactly can the Fed effect and how do its actions eventually lower inflation? I'll look to Charles and Rob to answer this question please.

Charles Gascon:

Yeah, so I'll start off and then thanks for having me today. The main tool that the Federal Reserve has to manage its goals of maximum employment and price stability is to change short-term interest rates, notably the Fed funds target and associated rates.

The objective when you're changing interest rates is essentially to reallocate credit and spending over time. So when interest rates are high, it becomes more costly to borrow money. And as a result of that, consumers are likely to not borrow as much and reduce their consumption today to possibly consume more in the future. And what you're doing in this process is trying to match up demand with available supply that we have at this point in time.

So if we think about the environment that Rob described, we had an environment with really strong demand and constrained supply. So by increasing interest rates, the goal is to try to push some of that demand into the future in a point in which supply is then and more in line with demand. It's a very blunt tool. It doesn't allow pinpoint precision on specific goods and services. It's a very open-ended concept in that matter. So it can be very challenging to understand fully as we talked about, is it sector-specific challenges or are these broad-based changes throughout the entire economy? So once we start to see inflationary pressures being so broad based as we are today, that's again a good sign that it's time to act on a monetary policy front.

Robert Rich:

So I'll just add a couple things. I mean I think Charles did a great job describing how the Fed funds rate acts. I mean a couple points. One is just when we see the Fed funds rate going up and we see these other interest rates going up, we're typically going to see the initial effects in, as Charles mentioned in these interest sensitive sectors. So you would expect housing to slow and you'd expect to see auto demand to slow and other sort of purchases that involve sort of borrowing to those for those things to slow. But then I think it's important to understand that once you see that initial slowing in those sectors, then we're going to see this broadening as Charles mentioned, of demand slowing.

So let me just give a really bad example, but I mean suppose we do in fact see the demand for autos to slow. Well, that might slow the demand for steel. And so maybe steel mills will respond by slowing their demand for inputs. And so you can see now how that initial slowing in one in these sectors that are interest sensitive, how that can sort of broaden and spread throughout the economy. So the initial sort of impact will be in those interests sensitive sectors and we've in fact seen slowing taking place in exactly those sectors, but now we're seeing it broadening into the other parts of the economy.

I think there's one other channel too that I think is important that sort of contributes to maybe moving inflation down and that's the effect on inflation expectations. So I think one of the things that we understand and has certainly been sort of a key development in macro in just economics in general in the last maybe 50 years is how important expectations happen to be.

And so what I would suggest then when the Fed raises interest rates, there's also a channel that it influences through inflation expectations. And so basically when people undertake decisions,

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what they do today depends on what happened in the past currently, but as very much everyone in the panel have said, right, there's this forward looking component associated with it. And so there's a recognition that if inflation is high and persistent, and if somehow firms and consumers begin to incorporate this in their behavior that may raise their inflation expectations, that may then impact their price setting behavior, the prices that firms charge, the wages that sort of laborers are demanding.

That's very much a situation that we want to avoid here at the Fed because we recognize that higher inflation expectations will make it more difficult to bring inflation down. And so by responding to high inflation, by raising the interest rate, we hope to essentially keep inflation expectations what are sometimes called anchored or stabilized, which will then help bring about and help to lower the inflation rate. So the last thing I'll just say is the audience has probably heard quite a bit made about how Fed officials are monitoring expectations and inflation expectations to ensure that in some sense that they are remaining stable, but it's communications about their actions and the actions themselves that hopefully keep expectations more stabilized that should in fact help lower the inflation rate.

Michelle Park Lazette:

Thank you. So it sounds like the Fed can affect demand by making borrowing more costly. It can affect inflation expectations, what can't the Fed affect Ed, can I ask you to tackle this one? As it pertains to inflation and its movement what can't the Fed affect?

Ed Knotek:

Yeah, thanks Michelle. So it's a good question. And again, just to reiterate, so the monetary policy transmission mechanism, how monetary policy decisions affect the economy, it's really coming through financial markets and even there, while there are clear linkages, those linkages sometimes are more tenuous and they might be shorter lived or longer lived. So there's a lot of uncertainty about how that transmission mechanism is going to play out completely. But then there's also certainly limits on what the Fed can do. So to reiterate, the fed is really operating when it's moving monetary policy. It's affecting financial conditions and that's typically affecting demand. It's far less evidence that monetary policy can directly or even indirectly affect supply and especially supply in the near term. So if we look at the current situation, you have really robust demand in many parts and you have supply constraints. And those supply constraints have taken a variety of forms.

In some circumstances they have just been flat out limitations on the availability of goods. There have been shortages of key components. We've also been dealing with labor shortages in particular sectors. Monetary policy has very little effect, especially in the immediate term on those types of supply constraints, transportation, bottlenecks, supply shortages. Typically monetary policy is not able to affect people's labor supply decisions, the ability and willingness of people to go out and get a new job or enter the labor force. Those are largely outside of the scope of monetary policy. Monetary policies affecting financial conditions, and that's having an impact on the demand side more so than the supply side. So maybe over a really long terms, maybe you can tease out some of those connections on supply, but for the most part, the focus is really on demand and bringing demand into alignment with supply when it comes to monetary policy.

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Michelle Park Lazette:

Thanks, Ed. It has come to my attention that the chat may have been disabled, thus when I was encouraging folks to submit questions, it was an impossibility. So we wanted to let you all know that we have resolved this issue and we do welcome your questions. We have a few more to tackle and then we'll get into some registrant questions and hopefully the questions that you drop into the chat.

So here's a bit of a spicier question. Charles, I'm going to look to you to tackle this one. So when we see prices go up in the store and per ounce going down, is that inflation, shrinkflation? Are companies increasing their prices to take advantage of the times and of consumers?

Charles Gascon:

Yeah, so I'll start with the first part first. This inflation versus shrinkflation. The labor department and the commerce department, when they're trying to measure the CPI or the PCE price inflation, they're looking very closely to control for any changes in the quality of products or the size of a package. So they're not going to look for a box of cereal. They're going to say this size box of cereal, how much does it cost? And that's a very detailed methodology that they're going through when they're looking at these things. So while a consumer may see the same sticker price for the same box and then realize that the ounces has gone up or down accordingly, the labor department or the commerce department's going to make those adjustments. And if it's a case where the quantities went down and the price stayed the same, that would show up as inflation.

Similarly, I'll take the example of televisions where you've seen significant advancements in technologies. So you're also going to make adjustments for improvements in quality that may result in the price staying the same, but ultimately that would show up as declining prices or in this case, deflation. So there are going to be adjustments that are made to make sure that we're measuring the same thing over time in the process of getting to inflation.

I think the other thing that that's important to note, when we think about overall inflation, there are some products that we buy a lot. So our groceries, every week we're going to the grocery store and we're buying new things. There are other products that we may not consume that frequently. So say it's a vacation that you go on once a year or a car where you may only buy a car every couple of years, those prices are changing in the background. And so consumers may not notice that inflation's going on in some areas or prices are necessarily coming down in some areas because they just are not buying those products as frequently.

So one of the things that we see with respect to consumer expectations, they tend to be tied closely to what people buy a lot or more frequently and not necessarily large purchases such as rent where it may be fixed for an entire year before you see any adjustment on your rents that are going on. So I think that's the way we should think about broad price changes. In general, it can be very difficult to understand that the core basket.

And then the last part I would note on that is because we buy different things, the CPI numbers that we are looking at that are released tomorrow may not be exactly what people are feeling themselves because that CPI basket is for the average household. So that nets just all of our differences out and gives us the average household. So most likely none of us are average. So we're experiencing it in different basket at that point in time. So I think that's a very important point to know is what you feel today may be very different from the next person and it could

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change depending on what you have to buy in a given year. So older people may spend more on healthcare and if those costs are going up, they may feel a different pinch than younger people who may be spending more on education for example.

With respect to prices and how companies change prices, I think there's a few things that are really important to note here, which is companies are responsible for setting their prices in order to manage their own supply and their own demand for their products. So maybe it's just a hot product and people want to buy it, and a firm says, "Okay, I have an opportunity now to increase my profits so that I can grow my firm in the future" and they're going to take advantage of that, but they're also operating in a competitive landscape.

So I'll just use shoes as an example. So if one shoe sneaker company comes out and says, I'm going to triple the price in my shoes, they may find out that people aren't going to buy their shoes at that price and they'll switch to a competitor. So it's not the case that firms have absolute pricing power. They're always going to be thinking about what's going on in the background in these markets and how much of their demand they're going to lose by increasing their prices. Now get to some of the things that Rob talked about, which is when consumers are seeing prices moving up and they're seeing broad based inflation and their expectations are that maybe things are going to be higher in the future, firms may find it easier to pass on those cost increases that they're seeing and pass on those price increases to consumers.

Now, in a survey that we did last February, almost 90% of businesses that we spoke to said that they felt like they could pass on some of their higher cost to consumers. Now what we're starting to see as consumers pushing back on that, so switching to lower cost alternatives at the grocery store would be a perfect example of that. So consumers play a key role in the areas where consumers cannot necessarily play a role. Those industries tend to be highly regulated in order to make sure that there's no price gouging going on, but that's always a place that regulators are stepping in. In competitive markets, the same thing applies. Firms are not allowed to collude in fixing prices that's illegal and the kind of thing that regulators would step in and evaluate and make it whatever necessary changes need to be made.

Michelle Park Lazette:

Thank you, Charles. Okay, this question is for everyone who wants to answer it, but I'll start with you Charles, please. What is your estimate of 2023 inflation?

Charles Gascon:

Yeah, sure. So, again, this starting with my own views and not necessarily those are the Fed, but what I'll do is I'll provide a summary of where professional forecasters are and where policy makers are. And also keep in mind where we ended this year at. So CPI inflation end of the year, just a little bit under 6.5% the year before that, it ended the year just over about 7%. So we're looking at a period of time where inflation's significantly elevated. As an institution the Federal Reserve has a lot of credibility in the economy, and so professional forecasters in general are expecting that inflation's going to move quite swiftly back down to the target of 2%. So if you look at projections from policy makers and from professional forecasters, they're expecting inflation to be somewhere around 2.5 to 3.5% in that broad window by the end of the year.

Now I would say that consumer expectations for inflation are significantly elevated from those numbers and still in many cases in the 5% range. So I think you may say that a reasonable baseline is that we would get to 3% by the end of the year. However, I do think that the risks of

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that are still pretty highly uncertain and probably even skewed to the upside in many ways. So I think we have to be cautious of that and that we can't just put full weight on the fact that things are going to work out exactly as planned.

Michelle Park Lazette:

Thank you. Charles. Would any other panelists like to speak to your estimate of 2023 inflation or shall we jump into some chat questions?

Ed Knotek:

I can maybe offer a couple of perspectives. So I think there's a consensus view that inflation's going to come down, but I do think there's a lot of uncertainty around that as well. Just to kind of highlight, if you look at different models, for example, models that have a focus on the inflation dynamics from the 1960s and seventies would tend to think that inflation's likely to be more persistent because the deep history of inflation has that persistence, versus models that look at more recent times when inflation hasn't been as persistent, they think that inflation's going to come down pretty quickly.

So that just in a nutshell is some of the tension and the difficulties that we face with inflation forecasting. If you look at different models, they might have different predictions. They're focused on different elements of the price distribution or different ways in which inflation might play out. And this is reflected in part among the range of professional forecasters and even the range of policymakers. There's not a single forecast, there are many forecasts and we often look at the one in the middle or the average, but there's a lot of heterogeneity out there because the world may play out in a variety of different ways.

Michelle Park Lazette:

Well, and Ed ... Sorry, go ahead Rob.

Robert Rich:

Oh no, I just wanted to, I think highlight again some of this idea of the uncertainty associated with inflation. We are actually seeing on the goods front, we're actually seeing goods inflation actually negative, which means that goods prices are actually declining. But I think there's an important question on whether it's going to continue to go down, but whether it's going to sort of peter out around its current value and that again asks to questions, are we going to see globalization come back to where it was previously or not?

We know that certainly housing services has been running very hot, but we also know too that in the pipeline there should be sort of a slowing taking place there. And then there's another segment too, which is sort of services X housing, which is the one right now that is really kind of the wild card, the one where it's unclear how quickly it's going to go. So I think all of this just highlights that while there's a general understanding that we think inflation will going D will be going down, it still is difficult to exactly be able to quantify exactly what those magnitudes are going to be. So those are just sort of three pieces of the inflation process and obviously there's still is just a lot of questions about how each of them are going to sort of operate. So I just wanted to mention that.

Michelle Park Lazette:

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Thank you. So you mentioned different models focusing on different time periods. And interestingly one of the registration questions, so we received some questions from registrants, asked the following, and this is for all of you, but does the Fed adjust or change how it analyzes and attacks inflation? For example, I remember the high inflation rates from 1978 to 1983 and was wondering if we're handling inflation the same way now as we did during the '70s?

Brent Meyer:

Yeah, maybe I'll start with that. That's a fantastic question. So while I think we all ought to have a bit of humility, and I think everyone touched on the heightened uncertainty around forecasts, especially coming from models during this time period, one thing that I think that the broad federal reserve system, or at least my understanding of the literature around this, is we've sort of learned that there's a significant monetary aspect and Fed impetus on where inflation is likely to go. So if you go back and you analyze that great inflation time period from the '60s to maybe '82, one thing that becomes clear is that the FOMC at the time had the view that a lot of the price pressures that we were seeing came from outside of the Fed purview, that the Fed didn't really have a very strong control over where inflation was likely to be at any given point in time.

It was oil price shocks and other sort of shocks and relative price changes that had the greatest influence on where inflation was going to be over say a medium term horizon. And that's something that I think we can see clear evidence that the FOMC more recently during this time period, and we can quibble about how quick they were to sort of reverse course and start to tighten monetary policy. But that tightening was very significant and was very swift. And I think in large part that was informed by our previous experience what Ed mentioned that deep history with a high inflation environment.

Michelle Park Lazette:

Thank you, Brent.

Ed Knotek:

That's a good point Brent. And I think just to build on that, one key question is to what extent the shocks are similar to prior episodes or not. So to that, just to build on your answer, so we pay a lot of attention to inflation expectations precisely for the reason that you don't want to let them start to drive inflation. Because if those inflation expectations start moving up and they move up on a persistent basis and they're high for the short term and the medium term and the long term, then people are going to start to act on them. Price setters are going to act on them, wage setters are going to act on them, people are going to demand higher wages that might affect their economic decision making. And so then that makes an incumbent on the Fed and monetary policy makers more generally to really take that into account when they're setting policy and to keep those inflation expectations from moving.

And so what what's interesting about this episode is that you see rises in short run inflation expectations, and that's kind of across the board, that's among firms and consumers and then the medium and longer term, those have been more stable. But there is kind of an open question as to how long can that happen where you have high short term and stable medium to longer term. And I think that kind of the consensus you is that you need to get inflation down so that you don't risk the stability of those longer term expectations. And I think that's coming through in some of the policy actions that have been taken. So in order to avoid some of the '60s and '70s

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and what happened there, you want to be preemptive, proactive, and looking to bring inflation down more quickly to short circuit that process from happening. But you can still have shocks that are more akin to the ‘60s and ‘70s that might be more persistent than the more transient shocks that we saw in the ‘80s and ‘90s, for example.

Robert Rich:

And so let me just add onto what both Brent and Ed said. I think there's a couple other points just maybe to bring into the conversation. I mean, the experience of the ‘60s and ‘70s was invaluable as they said because we learned a lot of important lessons, the role that expectations play and that we monitor them much more closely. I think a couple of the things though that make policy today a little bit different, I think it's important to understand that in 2012 we announced an explicit inflation objective. So we now have a particular number that we're looking to get to hit in terms of our inflation objective with the idea in fact of trying to help move expectations there.

Then one other thing I'll just mention from the ‘60s and ‘70s is that there's also been some changes in the economy that for example, labor unions are not as important as they used to be also. So this just goes to show that while we're still, that we have to recognize too that there are changes taking place in the economy too. But I think that some of the changes in the US economy are important, but also the fact that we now are very explicit in terms of what our inflation objective is also a key difference between how we've conducted policy data versus the ‘60s and ‘70s.

Michelle Park Lazette:

Thank you. Okay, so we talked about the Fed influence and role with changing demand through borrowing costs. One of the chat questions speaks to borrowing. The asker says personal savings rate and the US average 3.3% in 2022, down from 16.8% in 2020 and 11.8% in 2021, the second lowest of any year on record, trailing only 2005. At the same time credit card spending is reaching new highs with credit card interest rates at their highest level in years, 19%. What is your view on this?

Ed Knotek:

I can take a stab at that. So a couple of things to think about here. So first off, so this has been a really unique set of circumstances where people couldn't go out and spend in many cases the way that they wanted to. So that combined with restrictions on spending, restrictions on activity help to really cause the savings rate to skyrocket because of that people, a lot of people built up a lot of savings in 2020 and 2021 and more recently, in essence, they've been spending them down. And there are different estimates to what extent that has been spent down, so that's been one factor that's driving demand. You know, just have a strong labor market, 3.4% unemployment, strong job growth in January, wage gains have been pretty solid in nominal terms. So there's a lot of demand out there. And so a lot of these credit card measures are based on nominal spending. So nominal spending is both the real spending, how many things people are buying, and it's also price growth. And so when you combine those two things, along with people kind of making up for lost time and spending a lot more, that's helping to boost those credit card spending numbers.

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So again, the point of monetary policy by raising interest rates is that one of the things that will affect is that you will see credit card interest rates rising. That in essence will help to put a damper on spending and reduce demand or slow the growth of demand over time to put it under better alignment with supply. So in that sense, this is right in line with the monetary policy transmission mechanism that we were talking about earlier. Whereas monetary policy makers raise interest rates, one of those interest rates is that's going to affect credit card interest rates. And over time that will typically slow demand, but that process isn't necessarily immediate. It can sometimes take a little while to play out.

Michelle Park Lazette:

Thank you, Ed. All right, we have a second question in the chat. Thank you everyone for submitting your questions. We're going to try to get to as many as we can. What resources do you use when trying to project future inflation?

Brent Meyer:

So I think we've kind of all touched on pieces of this already. Maybe you want to start with a good view of where underlying inflation is at the moment. And this requires sort of digging through the incoming price data, the CPI data we'll get tomorrow at, I'm sure Ed, Charles, and Rob and myself will be digging through that report looking for different aspects of it, looking to see where what's happening with that broad center or the broad inflationary impulse. You start with the data, you use economic models that to help use forecast inflation, and you also supplement that with data on inflation expectations and survey and anecdotal or qualitative information that all of our separate banks sort of engage in to develop as best you can. A solid narrative around where inflation's likely to be headed and a good understanding too, the uncertainties around that. So those are maybe the broad components. I don't know if you guys want to add anything else to that.

Charles Gascon:

Yeah, I would just add one kind of piece to what Brent said is we're going to run a lot of statistical models. There's a lot of interesting pricing dynamics that happen in various industries, and that's where having conversations with different contacts around the country become incredibly important to understand do these firms reset their prices once a year, once every six months, when do they reset their prices? Is it a summer kind of thing? Is it a spring kind of thing? And once you get a better sense of what's going on in those spaces, it can really help you refine those expectations. So I'll just give one example of a place where it's quite challenging right now, which is in the healthcare space, because a lot of health insurance or a lot of hospitals for example, will negotiate with insurance companies every couple of years. So while a hospital may be facing higher costs today, it may be a while before any of those costs start showing up in our higher premiums. So understanding what's going on in specific industries can help us refine, broadly speaking, what a model's going to be telling us so that we can kind of fine tune those numbers a little bit and maybe see what we're missing from some of the statistics.

Michelle Park Lazette:

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Thank you, Charles. Thanks, Brent. All right. Question number three. To the extent recent inflation has been driven by supply side imbalances, do higher interest rates exacerbate those problems by making business investment more expensive?

Charles Gascon:

I can tackle this one with an example. I mean, think the question is spot on. If you look at the housing market, I think it's a great example of some of the challenges that you can see, which is we want to see housing inflation slow. It's a key component of the CPI. And we saw housing prices slow as interest rates moved up and that's starting to slowly feed over into rents or it's expected to. The consequence of that is that we also saw home building slow quite dramatically because access to credit became much more challenging and the cost for exiting those products became and selling in these homes became more costly. So there is always this side effect that you have to work through. The timing isn't always perfect on how this works, but it clearly is a challenge and sometimes those are the unintended consequences.

Michelle Park Lazette:

Thank you, Charles.

Brent Meyer:

Yeah, and maybe if I could add on to that, this isn't necessarily directly related to monetary policy in influences, but one thing that you have going on with some of these supply constraints, especially labor constraints and labor shortages, you can actually see an increase in business investment due to trying to automate and work through some of the challenges that firms are having, fully staffing, getting up to a full employment levels for these firms. So there's a lot of things going on in the background here that might not necessarily lead to an aggregate business fixed investment picture that's really, really dour.

Michelle Park Lazette:

Thanks Brent. All right. Here's another question from our attendees. As inflation comes down as anticipated over 2023, what is the effect on the Fed's interest rate projection? Will interest rates decline in concert with declining inflation?

Charles Gascon:

I'll tackle that one. So when policymakers submit the projections that show up in what we call the summary of economic projections, they're starting with what they view to be appropriate monetary policy and then they're reporting the associated outcomes with that view of appropriate monetary policy. So when we look at the projections from policymakers in their December projections, I think the median, and you guys can correct me if I'm wrong here, but I believe it was about 5.1% was the Fed funds rate for, and that would be essentially optimal on average among all the participants. And associated with that interest rate is where you get that inflation rate down to right around 2.93%, something in that space. So it's interest rate set first, what's optimal, and then the associated outcomes for the economy with that policy rate. So that would be the way that you would interpret those, the policymaker projections.

Michelle Park Lazette:

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Thank you. Okay. The fifth question asks about the Phillips curve. So maybe when one of you tackles this, you can explain briefly what that is. The Phillips curve has long been a useful tool for monetary policy. Recent reports suggest that there isn't any systemic relationship between inflation and unemployment in the short run, leading to the idea that the Phillips curve is dead. However many suggest there is a long run relationship. The relationship seems to be intact during this cycle. Is the Phillips curve dead?

Ed Knotek:

I can take this one. So it's a great question and I think this is, there's long standing, there's been long standing debates about the Phillips curve. I mean this is not new. We've been debating the death of the Phillips curve for at least 20 years I think. So certainly it's a good question because especially if you just look at reduced form evidence, there appears to be very little evidence that inflation responds to the unemployment rate or even the employment gap, which is a measure of unemployment, less what we might think of as the natural rate or the non acceleration rate of inflation or however you want to think about it. I don't want to get into a discussion about the natural rate. So that suggests that maybe the Phillips curve is dead, but I think you have to take a step back and realize that a lot of that evidence is coming from times in which inflation was relatively quiet and monetary policy was actively managing the economy to keep inflation relatively low and stable.

So because that, what we call identification in economics becomes very difficult. So statistically it becomes difficult to separate the influence of the unemployment rate and a lot of other factors on inflation. There are lots of other statistical techniques out there that do find that there is a Phillips curve. It does exist. There's a lot of evidence to suggest that when you go into a recession and the economy weakens dramatically, that inflation does step down. There's evidence out there to suggest that when the economy's really, really strong, the labor market's very tight. That does push up inflation. But we did it, to be fair, we had a long period of time in which there was very not a very strong relationship.

So I think many economists would say that there is a Phillips curve, it can change over time. The strength of that relationship can change over time. But ultimately there is some type of a Phillips curve that's at play in the background of the economy. Do you want to rely on that entirely? Not necessarily because there's all these other effects. What the effect of inflation expectations is on inflation, there's cost shocks, there are lots of other things that aren't really entering into the most simple Phillips curve.

But at the end of the day, I guess I do think that there are Phillips curve effects that are out there. So that is one of the reasons, not the only, but one of the reasons why when you see high inflation, you typically need to think about ways in which you can slow the economy, slow demand in order to bring inflation back to targets. Not the only way, but it is a way in which you want to think about what monetary policy can and does do to reign an inflation.

Robert Rich:

I'll just add a little bit to this. I think the question is really one about maybe differentiating between sort of what's going on over a business cycle, the short run versus the long run. I think that generally most economists would think that actually over the long run inflation and unemployment really aren't going to have much of a relationship. So that's kind of this idea that the long run Phillips curve is sort of vertical in some sense. And the other points that Ed was

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addressing is really sort of these movements sort of along a Phillips curve where we typically, in the short one, we tend to see a sort of inverse relationship. But again, it's sort of difficult to uncover all these things in the data. There's been times when it looks like that Phillips curve has been more evident than it has been in other situations. So it's tough. But again, that's sort of more in terms of the short run. The long run though we typically think that sort of the unemployment rate in inflation really may not be that related to each other.

Charles Gascon:

And I was just going to be pretty explicit here and a question that I've gotten a lot is that we need the unemployment rate to go up for inflation to go down. As I think both of these points have made is there may be some relationship, but that's not the lever. It's not that you push the unemployment rate up to push inflation down. So if that's your view of them what a Phillips curve is, then that does not exist then I would say that is dead. And I think that's what shows up a lot in some of the discussions that I've had with people, which is we're trying to push the unemployment rate up in order to get inflation back down. And I'd say that that is not a mechanism in which it operates.

Michelle Park Lazette:

Thank you. So we are drawing near to the end of our event and I wanted to conclude our Q&A with lessons learned. What has this period of higher inflation taught you? Brent, do you mind going first?

Brent Meyer:

Well, it's taught me to have a lot of humility because ... Rob's laughing because maybe that's something I need a little bit more of. But no, I think heading into the pandemic when we're all shuttered up in our houses, and at the outset I think there was a strong view that this was all going to be an aggregate demand shock, that this was going to be a strong negative demand and we were heading into recessionary significant recession, recessionary dynamics were in play and that we had a playbook for that. And I think it became clear as the situation on involved that it was a heck of a lot more complicated than that.

I think this is why we talked a lot about uncertainty there with our forecast. There is so much noise happening in relative prices in those CPI reports when we're digging them through and trying to figure out what underlying inflation is that from. And from my standpoint, it just causes you to take a step back, reevaluate and slaps some giant forecast errors or error bands around any of your forecasts. So I guess I'll stop there. Maybe somebody else has something more intelligible to say.

Michelle Park Lazette:

Any other lessons learned?

Robert Rich:

So I'll just maybe quickly, I laughed because I think as with Brent, I think there was a great deal of humility. I think one of the things, we founded the Center for Inflation Research in 2018 and for the first couple years we didn't think anyone cared about inflation because our biggest concern was how can we get inflation up to 2% and then suddenly the pandemic comes along

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and suddenly inflation is back and very much a central concern. From my own perspective, I think that one of the things that I learned about this was I think there was a tendency to sort of think about inflation without thinking about maybe goods and services. And I think one of the things that we really may have learned is that what was different about the dynamics of inflation was that we saw sort of goods inflation moving up first and then had to then think about monitoring that and then thinking about how it services inflation too.

And then also the fact that we were presented with a lot of unique circumstances that we had not dealt with before. So in some sense that's quite exciting because it does provide an opportunity for greater research. It just perhaps would've been nice if it wouldn't have been as severe as it turned out to be. But I think it goes to show that we shouldn't always sort of think that we've got it figured out. The world will always present challenges and I think it's going to make us have to think a lot more closely about the inflation process and to learn from what we might have missed initially. And I think that overall will be a good thing.

Ed Knotek:

I'm going to just build on those two responses by thinking that there's there, there's more shocks out there than you can possibly imagine. Things that you might think are zero probability events can actually be realized. I mean, we had a really long period of really stable inflation. And so I think that kind of, I don't want to say it built complacency, but it really suggested that the world had changed in a fundamental way. And then you get big enough shocks and enough of them and they're all kind of combined and then you can move regimes very quickly. And so I think just keeping flexibility and having an eye towards the low probability events, this reiterates the necessity to be doing that.

Charles Gascon:

And I'll just wrap up. I think what I've noticed in my conversations with households and businesses in this period where we've had really high inflation is just when prices are volatile, it's hard to get signals as to what to do. And people make mistakes because they no longer realize if a price is higher than the last time they bought a product, if it's that they're getting a good product or if the price just changed. Businesses really struggle to figure out how to price their products to sell. They don't know what their costs are going to be. And it really consumes a lot of decision making instead of thinking about, oh, what should I invest in? How should I hire my workers? There's a lot of conversation about prices that normally just never happens, and you can see how it starts to feed through the economy and really take hold in ways that makes it hard to have maximum employment. So I would just end with my own view has become that we have a dual mandate of maximum employment and price stability. I've come to believe that price stability is the necessary condition that you really need to have first in order to achieve long run economic growth and reach that maximum employment piece. So I really put inflation much higher up on the list as being incredibly important for long run growth for the economy is getting that price stability back in line.

Michelle Park Lazette:

Well, thank you Brent, Charles, Ed, and Rob for the informative discussion. And thank you to those of you who attended and asked questions. If you found today's discussion interesting, please consider subscribing to the newsletter from the Center for Inflation Research and for all

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