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# FEDERAL RESERVE CHAIR JEROME POWELL: THE ECONOMIC OUTLOOK, INFLATION, AND THE LABOR MARKET

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## INTRODUCTION:

GLENN HUTCHINS Co-Founder, North Island Co-Chair of the Board, The Brookings Institution

## **REMARKS**:

JEROME H. POWELL Chair of the Board of Governors, Federal Reserve System

#### MODERATOR:

DAVID WESSEL Director, The Hutchins Center on Fiscal and Monetary Policy Senior Fellow, Economic Studies, The Brookings Institution

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Glenn Hutchins [00:05:43] Good afternoon. I am Glenn Hutchins, co-chair of the Brookings Board. And on behalf of our president and some of my fellow trustees are here in the audience today, it's my great pleasure to welcome all of you, both our post-pandemic, in-person audience here— a packed house, great to see— as well as our sizable broadcast and online audience. Thank you for joining us today. When President Obama named Jay Powell to the Federal Reserve Board as governor in 2012, no one— including I suspect Jay— expected him to become Fed chair. When President Trump named Jay Powell Fed, as the Federal Reserve chairman in 2018, hardly anyone anticipated the global pandemic. And don't forget that then the Fed's challenge was too little, not too much inflation. So Jay Powell has repeatedly been forced to confront the unexpected and had to steer the United States economy through uncharted waters. He's done it with a steady hand, great personal integrity, independence, and an unwavering commitment to the Fed's dual mandate price stability and maximum sustainable unemployment, employment, though I don't think I need to explain any of you that today, despite stiff headwinds, both economic and political.

So we're pleased to welcome to the stage today on behalf of the Brookings Institution and the Hutchins Center on Fiscal and Monetary Policy, Jay Powell. Following his remarks, Mr. Powell will field questions from David Wessel, the director of Hutchins Center, and from the audience. Jay, thank you for joining us.

Jerome Powell [00:07:24] Thank you, Glenn. It's great to be here today. It's great to be back at Brookings. So today, I'm going to offer a progress report on the FOMC's efforts to restore price stability to the U.S. economy for the benefit of the American people. And that report must begin by acknowledging the reality that inflation remains far too high. My colleagues and I are acutely aware that high inflation is imposing significant hardship, straining budgets and shrinking what paychecks will buy. This is especially painful for those least able to meet the higher costs of essentials like food, housing and transportation. Price stability is the responsibility of the Federal Reserve and serves as the bedrock of our economy. Without price stability, the economy does not work for anyone. In particular, without price stability, we will not achieve a sustained period of strong labor market conditions that benefit all. We currently estimate that 12 months PCE inflation through October ran at 6.0%, while the October inflation data received so far showed a welcome surprise to the downside. These are a single month's data, which followed upside surprises over the previous two months. As figure one makes clear, down months in the data have often been followed by renewed increases. It

will take substantially more evidence to give comfort that inflation is actually declining, and by any standard, inflation remains far too high.

For purposes of this discussion, I'll focus my comments on core PCE inflation, which omits the food and energy inflation components, which have been lower recently but can be quite volatile. Our inflation goal is for total inflation, of course, as food and energy prices matter a great deal for household budgets. But core inflation often gives a more accurate indicator of where overall inflation is heading. 12-month core, core PCE inflation stands at 5.0% in our October estimate, approximately where it stood last December, when policy tightening was in its early stages. Over 2022, core inflation rose a few tenths above 5%, and it fell a few tenths below, but mainly it moved sideways. So when will inflation come down? I could answer this question by pointing to the inflation forecasts of private forecasters or of FOMC participants, which broadly show a significant decline over the next year. But forecasts, forecasts have been predicting just such a decline for more than a year, while inflation has moved stubbornly sideways. The truth is that the path ahead for inflation remains highly uncertain. For now, let's put aside the forecasts and look instead to the macroeconomic conditions we think we need to see to bring inflation down to 2% over time.

For starters, we need to raise interest rates to a level that is sufficiently restrictive to return inflation to 2%. There's considerable uncertainty about what rate will be sufficient, although there's no doubt that we've made substantial progress, raising our target range for the federal funds rate by 375 basis points since March. As our last post-meeting statement indicates, we anticipate that ongoing increases will be appropriate. It seems to me likely that the ultimate level of rates will need to be somewhat higher than thought at the time of the September meeting in the summary of economic projections. I will return to policy at the end of my comments, but for now I'll simply say that we have more ground to cover. We're tightening the stance of policy in order to slow growth in aggregate demand. Slowing demand growth should allow supply to catch up with demand and restore the balance that will yield stable prices over time. Restoring that balance is likely to require a sustained period of below trend growth.

Last year, the ongoing reopening of the economy boosted real GDP growth to a very strong 5.7%. This year, GDP was roughly flat through the first three quarters, and indicators point to modest growth this quarter, which seems likely to bring the year end with very modest growth overall. Several factors contributed to this slowing growth, including the waning effects of reopening and of pandemic

fiscal support, the global implications of Russia's war against Ukraine, and our policy actions which tightened financial conditions and are affecting economic activity, particularly in interest-sensitive sectors, such as housing. So we can say that demand growth has slowed, and we expect that this gross growth will need, will need to remain at a slower pace for a sustained period. Despite the tighter policy and slower growth over the past year, we have not seen clear progress on slowing inflation.

To assess what it will take to get inflation down, it's useful to break core inflation into three component categories. Core goods inflation, housing services inflation, and inflation in core services other than housing. Core goods inflation has moved down from very high levels over the course of 2022, while housing services inflation has risen rapidly. Inflation in core services, ex housing has fluctuated, but shown no clear trend. And I'll discuss each of these items in turn. Early in the pandemic, goods prices began rising rapidly as abnormally strong demand was met by pandemic-hampered supply. Reports from businesses and many indicators suggest that supply chain issues are now easing. Both fuel and non-fuel import prices have fallen in recent months, and indicators of prices paid by manufacturers have moved down. While 12-month core goods inflation remains elevated at 4.6%, it has fallen nearly three percentage points from earlier this year. It is far too early to declare goods inflation vanquished, but if current trends continue, goods prices should begin to exert downward pressure on overall inflation in coming months.

Housing services inflation measures the rise in the price of all rents and the rise in the rental equivalent cost of owner-occupied housing. Unlike goods inflation, housing services inflation has continued to rise and now stands at 7.1% over the past 12 months. Housing inflation tends to lag other prices around inflation turning points, however, because of the slow rate at which the stock of rental leases turns over. The market rate on new leases is a timelier indicator of where overall housing will go over the next year or so. Measures of 12-month inflation in new leases rose to nearly 20% during the pandemic but have been falling sharply since about mid-year. As Figure three shows, however, overall housing services inflation has continued to rise as existing leases turn over and jump in price to catch up with the higher level of rents for new leases. And this is likely to continue well into next year. But as long as new lease inflation keeps falling, we would expect housing services inflation to begin falling sometime next year. Indeed, a declining, a decline in this kind of inflation underlies most forecasts of declining inflation.

Finally, we come to core services other than housing, and this spending category covers a wide range of services from health care and education to haircuts and hospitality. This is the largest of our three categories, constituting more than half the core PCE index. Thus, this may be the most important category for understanding the future evolution of core inflation. Because wages make up the largest cost in delivering these services, the labor market holds the key to understanding inflation in this category. In the labor market, demand for workers far exceeds the supply of available workers, and nominal wages have been growing at a pace well above what would be consistent with 2% inflation over time. Thus, another condition we're looking for is the restoration of balance between supply and demand in the labor force, in the labor market. Signs of elevated labor market tightness emerged suddenly in mid 2021. The unemployment rate at the time was much higher than the 3.5% that had prevailed without major signs of tightness before the pandemic. Employment was still millions below its level on the eve of the pandemic. Looking back, we can see that a significant and persistent labor supply shortfall opened up during the pandemic, a shortfall that appears unlikely to fully close any time soon.

Comparing the current labor force with the Congressional Budget Office's pre-pandemic forecast of labor force growth reveals a current labor force shortfall of roughly three and a half million people. This shortfall reflects both lower than expected population growth and a lower labor force participation rate. Participation dropped sharply at the onset of the pandemic because of many factors including sickness, caregiving and fear of infection. Many forecasters expected that participation would move back up fairly quickly as the pandemic faded, and for workers in their prime working years, it mostly has. Overall participation, however, remains well below pre-pandemic trends. Some of the participation gap reflects workers who are still out of the labor force because they're sick with COVID-19 or continue to suffer lingering symptoms from previous COVID infections or long COVID. But recent research by Fed economists finds that the participation gap is now mostly due to excess retirements. That is, retirements in excess of what would have been expected from population aging alone. These excess retirements might now account for more than 2 million of the three and a half million-person shortfall in the labor force.

What explains these excess retirements? So health issues have surely played a role as COVID has posed a particularly large threat to the lives and health of the elderly. In addition, many older workers lost their jobs in the early stages of the pandemic when layoffs were historically high.

The cost of finding new employment may have appeared particularly large for these workers, given pandemic related disruptions to the work environment and health concerns. Also, gains in the stock market and rising house prices in the first two years of the pandemic contributed to an increase in wealth that likely facilitated early retirement for some people. The data so far do not suggest that excess retirements are likely to unwind because of retirees returning to the labor force. Older workers are still retiring at higher rates, and retirees do not appear to be returning to the labor force in sufficient numbers to meaningfully reduce the total number of excess retirees. So the second factor contributing to labor, to the labor supply shortfall is slower growth in the working age population. The combination of a plunge in net immigration and a surge in deaths during the pandemic probably accounts for about one and a half million missing workers.

Policies to support labor supply are not the domain of the Fed. Our tools work principally on demand and without advocating any particular policy. However, I will say that policy to support labor force participation could over time bring benefits to the workers who join the labor force and support overall economic growth. Such policies would take time to implement and have their effects. For the near term, a moderation of labor demand growth will be required to restore balance to the labor market. Currently, the unemployment rate is at 3.7%, near 50-year lows, and job openings exceed available workers by about 4 million. That is about 1.7 job openings for every person looking for work. So far, we've seen only tentative signs of a moderation in labor demand. With slower GDP growth this year, job gains have stepped down from more than 450,000 per month over the first seven months of the year to about 290,000 per month over the past three months. But this job growth remains far in excess of the pace needed to accommodate population growth over time, about 100,000 per month by many estimates. Job openings have now fallen by about a million and a half this year but remain higher than at any time before the pandemic. Wage growth too shows only tentative signs of returning to balance. Some measures of wage growth have ticked down recently, but the declines are very modest so far relative to earlier increases and still leave wage growth well above levels consistent with 2% inflation over time. To be clear, strong wage growth is a good thing, but for wage growth to be sustainable, it needs to be consistent with 2% inflation.

So let's then sum up this review of economic conditions that we think we need to see to bring inflation down to 2%. Growth in economic activity has slowed to well below its longer run trend, and this needs to be sustained. Bottlenecks in goods production are easing and goods price inflation

appears to be easing as well. And this too must continue. Housing services inflation will probably keep rising well into next year, but if inflation on new leases continues to fall, we will likely see housing services inflation begin to fall later next year. Finally, the labor market, which is especially important for inflation in core services ex housing, again accounted for more than half of the category, shows only tentative signs of rebalancing, and wage growth remains well above levels that would be consistent with 2% inflation over time. So despite some promising developments, we have a long way to go in restoring price stability.

Returning to monetary policy, my FOMC colleagues and I are strongly committed to restoring price stability. After our November meeting, we noted that we anticipated that ongoing rate increases will be appropriate in order to attain a policy stance that is sufficiently restrictive to move inflation down to 2% over time. Monetary policy affects the economy and inflation with uncertain lags, and the full effects of a rapid tightening so far are yet to be felt. Thus, it makes sense to moderate the pace of our rate increases as we approach the level of restraint that will be sufficient to bring inflation down.

The time for moderating the pace of rate increases may come as soon as the December meeting.

Given our price, our progress in tightening policy, the timing of that moderation is far less significant than the questions of how much further we will need to raise rates to control inflation and the length of time it will be necessary to hold policy at a restrictive level. It is likely that restoring price stability will require holding policy at a restrictive level for some time. History cautions strongly against prematurely loosening policy. And I'll close by saying that we will stay the course until the job is done. Thank you.

David Wessel [00:22:43] Thank you very much, Chair Powell. I think you spared me the chore of asking you to pick between 50 and 75, so I won't have to ask you that. Thank you for your last paragraph. But I want to talk a little bit about wages and inflation. So, as you said, wages are rising faster than is consistent with a 2% inflation rate, assuming reasonable productivity. You said in November that wages are not the principal cause of prices going up. But for many workers, real wages have been falling lately. So I wonder, isn't there room for wages to rise a bit faster so workers can make up lost ground? And what level of wage increases do you think is consistent with a 2% inflation target?

**Jerome Powell** [00:23:29] Okay. So I guess I would start by saying that the, the inflation that we saw at the beginning of this episode in, back in March of 21, was not really related to wages at all.

It was related to tightness in, in goods markets, largely due to supply chain issues. Over time, though, inflation has now spread broadly through the economy. And while I would still say that the inflation we're seeing now is not, is not principally related to wages, we think that wage increases are probably going to be a very important part of the story going forward, particularly as it relates to that third category of, of core services, ex housing. So, so we think it is an important thing going forward. And ultimately in the service sector in particular, where wages and benefits are by far the largest cost, wages need to go up. And of course, we want wages to go up. We want wages to go up strongly. But they've got to go up at a level that is consistent with 2% inflation over time, making basic assumptions about productivity. And I would, so if you look at the principal wage measures that we look at, I would say that you're one and a half or 2% above that with, with current wage increases.

So particularly the employee, employment compensation index and the average hourly earnings index, look at those two. It's about one and a half percent higher than what would be consistent making various adjustments, including for productivity from nominal wages. So, and as we look at the labor market today, including today's, today's JOLTS data, what you see is a labor market that there's a real imbalance between supply and demand. There are 1.7 job openings for every unemployed worker, everyone looking for a job, there, the so-called jobs-workers gap is about 4 million, meaning if you look at all of the available jobs, including people who are working and then look at people who are in the labor force or looking for a job, there's a 4 million shortfall. So you're in that world. And, you know, we think that we, there's a job for, for moderating demand in there and getting the labor force back into balance.

**David Wessel** [00:25:47] You don't think that there's a possibility that we could, we should have a period of catch up of wage increases above the sustainable level and that businesses with relatively fat profit margins can absorb some of that without passing it through.

Jerome Powell [00:25:59] So that's a, you know, the question of the worker share of profits and that kind of thing is not really related to this. Right now, people's wages are being eaten up by inflation. So what you want to do is you want to have inflation stable and then have a very strong labor market where the biggest wage gains are going to the people at the bottom end of the spectrum. And we had that at the end of the very long expansion that ended with the pandemic. That's not what we have now. Now, for most workers, for most workers, the increases are getting, wages are being eaten up by inflation. That's actually not true at the bottom end, where wage increases are higher than

inflation, and that's a good thing. But if you want to have a sustainable, strong labor market where real wages are going up right across the wage spectrum, especially for people at the lower end, you've got to have price stability. And until we restore that, we can't, we can't get back to that place where we, where we kind of were for the two years before the pandemic hit.

**David Wessel** [00:26:53] And did you take, when you look at today's JOLTS data, which measures the vacancies and quit rates, did you find that encouraging?

**Jerome Powell** [00:27:03] More or less in line with expectations.

**David Wessel** [00:27:05] But that's going in the right direction.

Jerome Powell [00:27:07] That's a good thing, right? So yeah. So I guess job openings came down by several hundred thousand to, to where they are now. And that's a positive thing. As you know, the relationship between job openings and unemployment is, is a very fraught one. And job openings right now compared to unemployment are at their all, near their all-time high levels. So it has been our view that there's a possibility that in this highly unusual situation, the labor market, labor market could come back into balance to some extent through a decline in job openings, and that there's been a typical relationship between increasing unemployment and declining job openings. But that our thinking has been and many labor economists share this, that you could get a decline in job openings that wouldn't produce the same increase, and a smaller increase in unemployment than is typically the case looking back in history because of the very outsized level of job openings and we've kind of seen that so far, but it's way too early to say that that'll, that that'll work.

**David Wessel** [00:28:08] So traditionally, the Fed looked at the unemployment rate as a measure of labor market tightness, and we've seen recently that that may be misleading.

Unemployment rate is still very low. And as you pointed out, that job vacancies are starting to come down. But to the extent that the Fed still relies on a Phillips curve kind of relationship, going forward, is the natural rate of unemployment a useless concept? How will the Fed, what measures will the Fed use to judge labor market slack as we look ahead to policy in the coming years?

**Jerome Powell** [00:28:41] I actually, so I think the, the way we think about it, of course, the standard way to think about it is it's the gap between the actual unemployment rate and the natural rate of unemployment that matters. Right. And the issue really, it's not that that framework doesn't make sense, it does make sense. But the issue is that the natural rate of unemployment is it's very hard to identify with certainty, even in normal calm times. But when there's a, you know, a violent

disruption of the labor market, it can move very substantially. So. And that happened at the beginning of the pandemic, you had, the labor market was very much disrupted, and we assumed that the, that the natural rate had moved up, meaning that for any level of unemployment, the labor market is tighter. So we knew that. And I think what was different in this cycle was really that you had to look at things like job openings and quits and reservation wages and just wages overall to tell you that that the natural rate of unemployment had really moved up quite a lot. But I don't think it's a problem with the framework. But it's, it is a, it is a fact, though, that it's very hard to pin down where the natural rate of unemployment might be when there's this massive disruption in the labor market going on.

**David Wessel** [00:29:51] So do you think that this, the JOLTS data, the job vacancies per unemployed worker, that that's going to be a lasting measure of labor market tightness for you at the Fed?

**Jerome Powell** [00:30:04] Yes, you know, I think people will tend to, for now, people tend to look at it.

**David Wessel** [00:30:07] But when you tell them you're looking at it, they tend to look at it. I've noticed that.

Jerome Powell [00:30:12] That's right. I think I would just say in this particular situation, we think it's important and we're going to find out empirically whether that was true for the reason I, the reasons I explained. We think that we can see a big decline in job openings and less of, less than you would expect of an increase in unemployment. So it was a, this was unique in so many different ways. This series of events was different from, one in particular, it's just that so much of the inflation was due to supply side constraints, which is not a feature of the US economy for, you know, for a long time.

**David Wessel** [00:30:44] Well, but vice chairman and vice chair Lael Brainard said the other day in a speech that she raised the question of whether long term changes of the economy like labor supply, deglobalization, climate change, could make the, could reduce the elasticity of supply and that this may be a problem going forward. Do you share that?

**Jerome Powell** [00:31:03] So that's, this is a great set of questions that we've all been thinking about a lot. And Lael's speech was really terrific on that. Agustín Carstens has given a couple of speeches on the same topic, including one in Jackson Hole this year.

David Wessel [00:31:14] The head of the Bank for International Settlements.

Jerome Powell [00:31:16] Yes, exactly. So, I mean, the question is, what's, does, is the new normal going to be, unlike this normal that we've had where supply side disruptions and constraints were relatively, you could look through the, the lore has been for a long time, you don't need to worry about that, it'll sort itself out, you know, a supply shock from oil prices or whatever. Are we going into a situation a little bit like the seventies where there will be ongoing repeat shocks and which would tend to have, to tend to put more upward pressure on inflation over time? We don't really know. I mean, that's a, it's a great question. But the question, I guess the real question is, if that's true, what are the implications? We still have a 2% inflation target, and we still have to use our tools to achieve it and to keep inflation expectations anchored. But it's a, it's a very hard to know, it's very hard to know the answers to these things. I mean, we, we tend to assume things will go back to the way they were just naturally. But that doesn't seem to be happening so far.

**David Wessel** [00:32:14] Right. Right. Now, you mentioned in your remarks that forecasts of inflation have not only those at the board of governors, but in the private sector as well, have been lousy, inflation is not behaving the way the forecasters said. So I wonder how you think about using forecasts of inflation and making policy if you can't tell us— or if your staff can't tell you— with some degree of confidence what inflation is going to be, six, 12, 18, 24 months out, how do you think about that in deciding when you make policy decisions?

Jerome Powell [00:32:47] So I'll say that the, it is very difficult to forecast inflation now. And one of the reasons is just that the situations are, the situation is so different from the normal one. And as I mentioned, a lot of it is just that the difficulty is just the supply side constraints that we've had. We had no, no experience in forecasting that, it was, you know, this was a case of first impressions. So. So that was, that was very difficult. Nonetheless, we have, we do make forecasts. We'll continue to make forecasts. The way I tried to get around that in my remarks was to say, let's put the forecast aside for a second and let's try to identify the macroeconomic conditions that we think we need to see that would put downward pressure on inflation. So that's, that's a way to think about it. We'll continue to make forecasts, but we're going to have to be humble and skeptical about forecasts, I think, for, for some time. And that calls for a lot of risk management. And the other difficulty, of course, is that monetary policy works with long and variable lags. In particular, inflation is, you know, is at the end of that train. And so if you're waiting for actual evidence that inflation is coming down, you know, you, it's

very difficult not to over tighten if that's, if that's all you're doing. So we have a risk management balance to strike. And we think that slowing down at this point is a good way to balance the risks of—

David Wessel [00:34:06] Slowing down on the pace of—

Jerome Powell [00:34:07] On the pace of rate hikes.

**David Wessel** [00:34:08] I see. But it's still a problem if you, if you can't use today's inflation rate to set policy and you're not sure what tomorrow's inflation rate is, you're saying the inflation forecasts will be secondary to the economic conditions that you think are likely to generate more or less inflation? Is that.

Jerome Powell [00:34:25] Well, first of all, I'm agreeing that it's a very difficult situation in which to forecast inflation. And really very few professional forecasters have gotten it right. So I think we'll look at various things. We'll look at our forecasts, we'll look at the actual data, we'll look at, I gave you the three pieces and the, the elements of those three pieces of, of core inflation that we're looking at. We will, you know, look at these macroeconomic conditions. You know, for example, we will try to identify a, a level of, of a stance of policy that's sufficiently restrictive to bring inflation down. We can't identify that with great precision and confidence, but we'll make, we'll look at the changes in financial conditions and the effects that those financial condition changes are having on the real economy. We'll look at all of those things and make a judgment, and it'll have to be judgment, as to, as to what you know, what that is.

**David Wessel** [00:35:19] But when you think, you know, you've talked frequently about the need to have policy restrictive and that often is used as, the definition of restrictive is above some neutral rate of interest, the one that will prevail when all is calm. And you gave a speech at Jackson Hole a number of years ago, pointing out how identifying all these things, the natural rate of unemployment, the natural rate of interest, the problem is that we don't know what they are. So how will you know when policy is restrictive? How do you think about what the neutral rate is under the current conditions of the economy?

Jerome Powell [00:35:54] And the answer to that is there, there isn't any one perfect summary statistic. So the way I think about it and I think the way we generally think about it is we make our policy changes and they affect financial conditions. Actually, it works the other way around. Natural conditions tighten in expectation now, different from what it used to be. So they tighten. And so we monitor the tightening of financial conditions. We look at the history of these financial conditions

index and we ask how tight, how tight are financial conditions. We also look at the effect that the tighter financial conditions are having on the real economy, particularly now interest sensitive spending, but also, you know, other things as conditions tighten. We also look, so one of the financial conditions we look at, we'll, we'll look at, at the whole, the entire rate curve, if you think about risk free, the Treasury rate curve, we'll look to see positive, significantly positive real rates across the curve. And, you know, you have that, you can argue about the short end, but you've got to pick some sort of a forward leaning, forward looking reading for inflation. And I think, you know, inflation compensation in the markets definitely reflects confidence in us bringing down inflation, so. So, you've got real rates really across the whole yield curve.

You also look, though, at credit spreads and what are private companies borrowing at, because most borrowing doesn't happen at the federal funds rate. It happens in many other places. We look at asset prices, we look at, you know, exchange rates, which are just another asset price. We look at all those things and we try to make a judgment about, about whether, whether looking at, and put some weight on, you know, on the, on the real, the real interest rate curve, some weight on the other aspects I talked about. I think you have to make a judgment at the end, though, that you're restrictive.

**David Wessel** [00:37:34] So an estimate of the neutral rate of interest didn't seem to be one of the big factors in that list you gave.

Jerome Powell [00:37:39] No it's in there, you, it's in there in looking at the real rate curve. So you look at the real rate curve, you'd, you'd, you'd want, policy, real rates to be above what we'd estimate as the longer run neutral rate. The issue is, you know, the longer run neutral rate is, is a rate at a time of full employment and 2% inflation and the economy in perfect equilibrium. That isn't where we are.

**David Wessel** [00:38:03] Yeah, I noticed. I turn to the balance sheet here and I'm going to turn to questions from the audience in a minute. What criteria are you going to use to decide when to end the shrinking of the balance sheet? Is it the economy? Is it where the market money, money markets are functioning well? Is it whether the Treasury is having trouble raising money? How do you decide when you've shrunk enough, when you end the shrinking?

**Jerome Powell** [00:38:27] So I should refer you to a piece of, a document that is, that lays all this out in detail that I really should be reading to you. But I'll paraphrase it.

David Wessel [00:38:35] Thank you.

**Jerome Powell** [00:38:35] But if I don't get it exactly right.

**David Wessel** [00:38:38] No one, no one will take, pay attention if you don't get it exactly right. Don't worry.

Jerome Powell [00:38:41] Pretty much wing it.

David Wessel [00:38:42] Relax.

Jerome Powell [00:38:43] So we're in an ample reserves regime. And what that means is that, you know, changes in the reserve level will generally not affect the federal funds rate. So there's more than enough reserves in the system. So we don't, we're not close to reserve scarcity. So what we've said is that we would allow reserves to decline until we're somewhat above the level that we think is, is consistent with an, you know, with scarcity. Right. And then for a while, what you do is you, you hold the balance sheet constant and non-reserve liabilities grow while reserves shrink. So we sort of shrink gradually down to that. And then at a certain point we're just going to call it, we're not looking to really go back into proving that they're scarce. Because what happens is— and you saw this back a few years— the demand for reserves is not stable and it can move up and down very substantially. So we want to stop at a place that's safe. You know, having a lot of reserves in the, in the system is really a good thing. It's really a public benefit to have plenty of reserves, plenty of liquidity in the markets and in the banking system, in the financial system generally. So that's how we'll, that's how we would do it.

**David Wessel** [00:39:52] In the minutes of the last FOMC meeting, it said the, the staff had a forecast that does not, a forecast below potential growth, but not a recession. But then there was this interesting sentence where the staff said the possibility that the economy would enter a recession sometime over the next year is almost as likely as their baseline forecast. Is that where you're, how you look at it.

**Jerome Powell** [00:40:17] So I. I have resisted the temptation to handicap it.

David Wessel [00:40:21] Ah, go on.

**Jerome Powell** [00:40:22] I think I'll continue to do that. But again, the way I think about it is I, I do continue to believe that there's a path to a soft, or soft-ish, landing. I do believe that.

**David Wessel** [00:40:33] And the definition of a soft landing as what? Unemployment goes up a little. But we don't have a recession.

Jerome Powell [00:40:38] Yeah, unemployment goes up. But not, it's not, it's not a hard landing. It's not a severe recession. You know, you can think of unemployment going up, but not, not, you know, really spiking as it does in some, in some recessions. So that's how I think about it. And I think the path is pretty clear. It's we, you know, the labor market conditions soften. We see inflation and, you know, the goods inflation gets better, housing services inflation gets better, and the labor market softens but doesn't go into recession. And, and you see inflation start to come down. And I mean, I think that's very plausible. I don't, I don't want to be the handicapper on it. And, you know, of course, our job is to try to achieve that. And I think it's still achievable, although, you know, if you look at the history, it's not a likely outcome. But I would just say this is a different set of circumstances.

**David Wessel** [00:41:24] But you said at the last press conference that you thought the path to that soft landing had narrowed. Has it continued to narrow, or has it widened, or I don't know if you can have a wider soft landing, but.

Jerome Powell [00:41:34] I don't know that it's changed since that was, this is, what, five, six weeks ago, I was asked the question, has it narrowed? Is it still possible? And has it narrowed, it's definitely still possible. And it has narrowed because if you look over the course of this year, nobody expected us to raise rates this much. No one expected inflation to be this strong and this persistent and this, you know, to move, to have spread so broadly through the economy. And so to the extent we need to get, keep rates higher or keep them higher longer, that's going to narrow the path to a soft landing. On the other hand, if we get good inflation data and we get evidence that all the things that I talked about, if all those things start to swing the other way, then we could very much achieve this.

**David Wessel** [00:42:17] In August 2020, you announced a new framework for monetary policy, the flexible average inflation targeting framework. And I wonder whether there's anything in that that you think we should be rethinking now in light of the recent experience?

Jerome Powell [00:42:31] We, so we said we would review, do another framework review in five years. And so that would be, to bear fruit in 25 or 26. So that's what we're going to do. We're going to stick to that. I think we need to see this through a full cycle. We need to see the other side of inflation and what the economy looks like after this historic episode to really make good judgments about that. I will say, though, that aside from the framework itself, we implemented it through guidance of various kinds. And, you know, we were, we, we put in really strong guidance because there were a lot of doubters that we would ever achieve 2% inflation, if you remember, that was the

main criticism. Little did we know. But one piece of guidance that we gave was—and I don't, I don't think this had anything to do with, with or much to do, let's say it that way, it didn't have much to do with all this inflation we're experiencing—but the one piece of guidance that we gave that I probably wouldn't do again is we said we wouldn't lift off unless, until we saw both maximum employment and price stability. And I don't think, I don't think I would do that again.

David Wessel [00:43:31] Because.

**Jerome Powell** [00:43:33] I think it limited, it's the tail risk. You know, we tend as human beings to underestimate tail risk. And I think we didn't, we didn't think, it seemed so unlikely. If you remember, 25 years of low inflation.

David Wessel [00:43:46] Right.

**Jerome Powell** [00:43:46] And many years after the pandemic, after the global financial crisis, of inflation everywhere in the world, its disinflation, just didn't seem likely. And, and yet here we are.

**David Wessel** [00:43:57] So it turns out that when you invite the chairman of the Federal Reserve to speak at Brookings, a lot of people email you questions. Most of them are questions that I've already asked or questions that were so poorly framed that I couldn't even understand the question. But somebody asked me this one. And so I want to give that person an opportunity to get an answer. What do you like to do in the morning before you start work?

**Jerome Powell** [00:44:25] Work. No, I get, I'm a, I'm a super early person and I, you know, I read a bunch of newspapers and drink my coffee and peace and then that's what I do.

David Wessel [00:44:36] And now that you're chair, do you still ride your bike to the-

**Jerome Powell** [00:44:39] Some. Yeah, some, I ride down, well I won't tell you where I ride, but I do, yeah, I ride.

**David Wessel** [00:44:43] The security guys thank you for that.

Jerome Powell [00:44:46] They're like, no.

**David Wessel** [00:44:46] Yeah. Okay. So here's the deal. We're going to take questions from the audience. You need to wait for a microphone to get to you because we have a lot of people online. You need to say who you are, and you need to remember that this is not an opportunity for you to make a speech or tell the Fed what it should do. It should be a question. It should be short, and questions end with a question mark. So come down here, somebody. Joe and then Jonathan.

**Audience Member** [00:45:20] Thank you, Joe Beaulieu, from Brevan Howard. So you've spoken both about risk management considerations and the inherent danger of inflation becoming entrenched. So I was wondering what, how much do risk management considerations suggest a terminal rate higher than would normally be expected to achieve your policy goals?

Jerome Powell [00:45:42] So I think there are, there are a number of dimensions, and it wouldn't necessarily, one of them, one of them would be potentially higher rate, but more I would think, one risk management technique is to go slower, right, to go slower and feel your way a little bit to to what we think is the right level. Another is to is to hold on longer at a at a high level and not, not, you know, loosen policy too early. I, I don't want to over tighten certain we, my colleagues and I do not want to over tighten because, you know, we I think that cutting rates is not something we want to do soon. So that's why we're slowing down and, you know, going to try to find our way to what that right level is. But in, I mean, theoretically, it's another dimension, but it's not, it wouldn't be my first choice.

David Wessel [00:46:31] Thanks. Jonathan

Jerome Powell [00:46:35] Hi. Thanks. Yeah, Jonathan Pingle with UBS. So I had a question about the imbalance between labor supply and labor demand. You know, one of the things that's a little obscured when we look at and discuss the labor force participation rate is there is a pronounced downward trend due to population aging. So when you think about realigning labor supply and labor demand, A, are, are FOMC officials hoping or expecting that participation really moves back up all the way to a pre-COVID peak? And related to that is, you know, the, the follow-on question, you know, how much of the realignment do you think needs to be done through restricting labor demand as opposed to the ability of supply to catch up?

So on labor force participation, I think, I think it's useful to go back, you know, ten years. And the forecast that the mainstream labor economists had was that you're right, aging, aging of the population leads to declining labor force participation, notwithstanding that, labor force participation was, was in effect, flat and a little bit up from 2013 to 2020, roughly. And that was because you had a, you had a strong, tight labor market. People were staying in the labor market longer than expected. That was really what it was. So our ability to predict is not perfect in this, except over long periods of time you have an aging population, so you're probably going have declining labor force participation. I don't think it's reasonable to expect that we get all the way back to where we were with labor force

participation in 2020 at 63.7, I guess, population adjusted. I don't think, I don't see that, but I wouldn't rule it out. And we're nowhere near that now. You know, we're a point and a half below that now. So the real question is, do we expect, do we expect to see big chunks of labor force participation? I got to say, this year we've seen in the aggregate, not much. And it's been, it's been very disappointing and a little bit surprising. So that's part of the story. The other part, as I mentioned, is population, is that the work, the labor force, the part of a, big part of the shortfall in labor force is actually population as well as participation.

**David Wessel** [00:48:47] So given population trends, given that there's still some, some workers are clearly anxious about going to work during COVID. And given that immigration is well below the levels that were projected before the pandemic, does most of the balancing have to come on the demand side?

**Jerome Powell** [00:49:05] Well, I think for now we have to assume that. We have to assume that we would, that's why I talked about, you know, supply side policies on labor, although they're not for us to recommend or to answer questions about.

David Wessel [00:49:19] Noted, please.

**Jerome Powell** [00:49:21] So yeah, the answer is yeah. I mean, that's what I kind of said that in my speech. We have to do what it takes to restore balance in the labor market to get back to 2% inflation. And that's what we're doing, really, just by slowing growth, job growth, rather than putting people out of work.

David Wessel [00:49:37] Joe Gagnon.

Audience Member [00:49:43] Thank you, Joe Gagnon, Peterson Institute. Chair Powell, back in 2018, you gave a speech questioning the role of the so-called star variables that the Fed uses to navigate. And there was a simple possibility raised that maybe unemployment could fall well below what the staff thought the natural rate u\* was then without causing inflation. But then COVID came and turned everything around. And as you just said, one interpretation of COVID is that u\* went way up and we were on the wrong side of it, which is inflationary. My question is, going forward, is it likely, do you think it's likely that things could reverse as the dust settles from COVID and we could end up back in that world where maybe we're on the other side of u\*, we don't know, it's hard to tell, what lessons did you learn from that period that, that got forgotten because of COVID, perhaps?

Jerome Powell [00:50:37] Well, unemployment went below the, so what we write down and what the staff writes down is a longer run use to our longer run estimate of the natural rate of unemployment. I guess one thing I would say is that, is that during the course of a long, relatively gradual, I mean, so we only have one experience, right, to, to generalize from but what I learned from that experience was long, relatively slow, not super-fast expansion. You really saw the natural rate of unemployment, the shorter-term natural rate come way down. We had three and a half percent unemployment with really little sign. Wages were just getting up to that level of productivity and 2% inflation. So we could be back in that place. I think we could certainly be back in that place. But what we've, what we've seen, you know, it's another n equals one situation with, with the pandemic. It's also unique. I would also point out, though, we did see, the inflation we saw at the beginning, we did have unemployment, sorry, natural rate of unemployment go up probably significantly. But the again, the original inflation we saw was not to do with, with the Phillips curve, with the, with the labor Phillips curve. It was not to do with that. It was to do with goods more.

**David Wessel** [00:51:47] So I think another way to frame Joe's question is, I think a lot of us thought that the lesson we learned when unemployment fell very far and we didn't get inflation, that maybe over time before you were in charge, the Fed was, aired on the side of being too tight, that it was too worried about the unemployment rate falling. And I think the concern is that, will we fight the last war and because of this experience, the Fed will be reluctant to experiment with a low rate of unemployment in the future.

**Jerome Powell** [00:52:17] I'd love to have that problem again. If we can get back to, you know.

**David Wessel** [00:52:21] Okay, so you've got like three years left in your term. You think you can pull this off in the next two years so we can run the n equals two experiment?

Jerome Powell [00:52:26] Absolutely.

David Wessel [00:52:28] Claudia Sahm.

**Audience Member** [00:52:34] Claudia Sahm, Sahm Consulting. So the question I had is we've had unexpectedly fast and large rate increases this year, and that has pushed up the dollar relative to basically any currency in the world. We've seen likely more financial market instabilities. So the Federal Reserve's dual mandate is for the United States. And yet, are you worried that a severe

global recession or financial market turmoil would come back to make it harder for us to achieve the U.S. dual mandate? Thanks.

Jerome Powell [00:53:07] So we do, we do, of course, look at global developments. We have a domestic mandate, of course, as every central bank does. But in this world, global financial markets and the global economy really matter for us. So we, we monitor all that very carefully. We really think— and my colleagues and I really think— that the best thing we can do for ourselves and for the global economy is to get inflation under control as quickly as possible. We don't think the world is going to be a better place if we, if we take our time and, and inflation becomes entrenched and then we have to go in later. The evidence is that the employment costs of bringing inflation down only rise with delay. So at the same time, we're not, or we don't want to do any more than we have to do, but we feel like as a risk management matter, we need to be, we needed to do what we did, and, and feel like we're now in a place, again, as I said, where we can, where we can slow down and, and try to reach that, that ultimate level.

**David Wessel** [00:54:08] But how much do you worry about what Claudia's question implies is we do something with rates, other people are forced to do things with rates, and that ends up spilling back to us and makes it harder for you to do it. So you have to take that possibility into consideration.

Jerome Powell [00:54:24] We absolutely believe that, we take that into consideration. The models explicitly take it into consideration. Of course, they're not perfect. No one no one would say we do it, we do it perfectly. But we, we I mean, we have a very large global model that we use for the global economy. And it absolutely takes into account what happened, what's happening with the real economy and monetary tightening and currency and all those things. It won't be perfect. But we do that. And we also sort of understand generally that you can you know, there's a lot of research and things, talk, people talking about this a lot right now that, you know, maybe the hole is bigger than the sum of the parts when it comes to tightening. Maybe it is, maybe it isn't, but we're aware of the risk of that. But again, I come back to look where we are. We've, we've raised, you know, 375 basis points. Markets are working. I think we're now in a position where we're, we're, we're in a place where we really can get inflation under control. And we haven't, unemployment's at 3.7%. So we haven't done, I don't regret getting to where we are. And I and I think broadly, the world will be better off if we can get this over quickly.

**David Wessel** [00:55:30] Thanks, Julia. Julia stand up so the mic can find you. And can you bring a mic down here to Feroli?

**Audience Member** [00:55:39] Can I ask a, two questions.

David Wessel [00:55:42] If they're short?

Audience Member [00:55:43] Yeah, very short. So one question on the labor market is how do you reconcile, you know, the characterization of the labor market as very tight with the fact that wage growth isn't keeping up with inflation and the labor share of GDP really hasn't risen since 2020. And then second question is how much credence or what kind of research do you rely on to think about the notion that a very tight labor market will lead firms to invest in and innovate and become more productive over time? And could that be a tailwind to productivity growth?

**Jerome Powell** [00:56:23] Okay, I wrote those down really fast now, and now is the problem with reading my handwriting. So you asked about.

**David Wessel** [00:56:30] The labor market is tight, but wages are not rising faster than inflation—.

Jerome Powell [00:56:34] Okay.

**David Wessel** [00:56:36] And the labor share of GDP, which has been depressed for some time, hasn't really started to rise. So how do you put that into your thinking?

Jerome Powell [00:56:44] So naturally, we understand that real wages are not going up for most people. But to me, that isn't the, that's true, but it's not really dispositive. I think the issue really is that it's one of salience, really. So you, at what point do people start saying, I need higher wages because, you know, my real wages are going down. You're giving me these 6% wage increases, but inflation is 7.7%. I need more of that. So we don't really know when that point is. But when you get to that point, you're in serious trouble. And we don't think we're at that point. But it can't be that we can go on for five years at very high levels of inflation and that it doesn't work its way into the wage and price setting process pretty quickly. So that's, that's a serious concern.

So on the second question, yes, you know, I think we're seeing that, you know, you're, you're seeing, in the service industries, you're going to see, you know, this this labor shortage that we have as I mentioned, it doesn't look like it's going away anytime soon. And that's absolutely, I think, certain to lead to a lot of investment in technology and, you know, labor replacement technology where there isn't, where there isn't labor. And I think you'll see quite a bit of that. It, could it be a dividend going

down the road? I would think it will have to be to, you know, to, to provide the services that the public wants to buy.

**Audience Member** [00:58:09] Thanks, Mike Feroli, JP Morgan. So you spoke about going somewhat restrictive and then staying there for a long time. Why would you prefer that over a shock and awe approach that goes very restrictive but for a shorter period of time. And I ask that because there's some evidence that sacrifice ratios are lower in a more aggressive regime like that.

Jerome Powell [00:58:28] I think we, I think we've been pretty aggressive. I would say. No, I don't, I don't agree. I mean, we wouldn't, you know, just raise rates and try to crash the economy and then, and then clean up afterwards. I wouldn't, I wouldn't take that approach at all. I think we're in a position where the, where the right thing to do is to is to move really quickly as we have and now slow down and get to that place where we think we need to be. And by the way, there's high uncertainty around that. It, you know, we have a broad set of thoughts about where that destination might be, but we could be wrong. You know, it can be higher than that. Could even be lower than that. We'll have to see. But I think that's the right approach. And, and that's also the approach that it would, would allow us not to throw away the option value of, of, you know, upending a lot of lives, which we would do if we, if we crashed the economy and raised, we might get rid of inflation. But at very high human cost.

**David Wessel** [00:59:23] There's a question in the very back, a woman in front of the camera. Do you want to stand up? Thanks.

**Audience Member** [00:59:33] Thank you so much for seeing me in the back here. Nancy Marshall Genzer from Marketplace. I'm just wondering, Chair Powell, is the Fed in danger of neglecting its maximum employment mandate? Is the maximum employment mandate taking a backseat to the stable prices or inflation mandate?

Jerome Powell [00:59:51] No, absolutely not. Absolutely not. We the, the thing is this. Without stable prices, we can't have maximum employment. And that's, that's how I think about it, and I think my colleagues as well. In the sense that if you're constantly fighting off inflation and having these battles and having to raise rates and it goes on for five or ten years as it can, you're not going to have maximum employment. The kind of, the situation we would love is to have another one of these very long expansions, and we've had four of them now in the last several decades. We, really when inflation was low after the seventies, we got out of the habit of these short, you know, these short inflation driven business cycles. And we were able to reach you saw where we were three and a half

percent unemployment. Those are really good for, very beneficial to our society to have these long expansions and the benefits start to go to people at the lower end of the spectrum in the seventh or eighth year in the last cycle. So I think the two things go together right now. The labor market is incredibly strong. Again, before this thing, we've never had 1.7 job openings for every unemployed person. So this is a great labor market in that sense. It's too great in a way, because it's going to be adding to inflation.

**David Wessel** [01:01:07] All right. Time for one more, in the back, gentlemen, on the aisle. Alright two questions. Two gentlemen on aisle. Keep them short.

Audience Member [01:01:18] Thank you. Orange, Orange Wang from South China Morning Post of Hong Kong. So I would just like to ask a question related to the Chinese, Chinese economy. So right now, a lot of analysts are arguing or believe that China's zero-covid policy is continuing to take a toll on the Chinese economy, but also likely to weigh on the global economy due to the size of China's market and its position in the global supply chain. So we're just wondering about what impact or how much impact do you accept that a continuously slowing Chinese economy would have on the U.S. economy or the fast next interest rate moves? And is China's current economic situation a disinflationary factor or a inflationary factor to the U.S.? Thanks.

Jerome Powell [01:02:07] I guess I'd just say that to the extent China's having shutdowns in, in the parts of the country and the parts of the economy that are deeply connected to global supply chains, that's going to make those supply chains less efficient, less effective. And, and so that will, that will have an effect on, you know, on the prices of some of these goods that, that are manufactured or assembled in China. So it does have an implication for, for the US. It's hard to say how big that will be without knowing how, you know, how persistent, how long these lockdowns take place for.

David Wessel [01:02:42] The gentleman behind you.

Audience Member [01:02:45] Thank you. Yevgeny Shrago with Public Citizen. I was wondering how you think about the tradeoff of restrictive policy and the supply constraints you mentioned. So in particularly when it has negative effects say, on housing production, that makes it harder to meet housing demand or on the cut congressional investment through the Inflation Reduction Act, in climate change mitigation and in energy policy that will make energy cheaper long term. How do you think about that tradeoff?

Jerome Powell [01:03:14] I don't think our restrictive policy would have much of an effect on the sort of climate mitigation investments you're talking about in terms of, of housing, you know that there are two things. One, there's sort of a longer run housing shortage that we have. But in the meantime, we had, coming out of the, coming out of the pandemic, rates were very low. People wanted to buy houses. They wanted to get out of the, you know, the cities and buy houses in the suburbs because of COVID. And so you really had a housing bubble. You had housing prices going up at very unsustainable levels and overheating and that kind of thing. So now, now the housing market's going to go through the other side of that and hopefully come out in a better place between supply and demand. But none of this really affects the longer run issue, which is that we, you know, it's, we've got a built-up country and it's hard to get zoning. It's hard to get housing built in sufficient quantities to meet the public's demand.

**David Wessel** [01:04:10] So I want to thank you, Chair Powell, for being generous with your time, and thank you all for coming. And I want to appreciate everybody asked a short question, which is, yeah, that's the first time in my experience in eight years in Brookings that's happened. I'd like it for all of you to stay in your seats for a minute, 'til the chairman can leave safely, and if you have paper or coffee cups or something, take them to the back of the room and dispose of them.

**Jerome Powell** [01:04:33] So thank you very much.