Christopher J Waller: The economic outlook and a cautionary tale on "idiosyncratic" price changes and inflation

Speech (via webcast) by Mr Christopher J Waller, Member of the Board of Governors of the Federal Reserve System, at the Stanford Institute for Economic Policy Research Associates Meeting, Stanford, California, 19 October 2021.

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Thank you to the institute for the opportunity to speak to you. Today my goal is to explain my outlook for the U.S. economy as well as how that perspective shapes my views on the appropriate approach to monetary policy.[1] I have three points I would like you to take away from my comments. First, while there has been a significant slowdown in third quarter gross domestic product (GDP) growth, it should rebound in the first half of 2022. Second, I believe that substantial progress has been made on both the inflation and employment legs of our dual mandate. Hence, I believe that we should soon commence tapering our asset purchases. Finally, the next several months are critical for assessing whether the high inflation numbers we have seen are transitory. If monthly prints of inflation continue to run high through the remainder of this year, a more aggressive policy response than just tapering may well be warranted in 2022.

In terms of economic growth, data for the third quarter of 2021 show that the economic recovery slowed as the effects of the Delta variant caused consumers and businesses to start pulling back on some forms of economic activity such as travel and leisure. Measures of consumer mobility, which are a good indicator of spending, grew strongly starting last winter but then started falling in June, around when the effects of Delta started to become significant. I and most other forecasters expected that real GDP would grow close to the very strong rate posted in the first half of the year, but it now appears that GDP growth will be closer to 3 percent at an annual rate.

The two major causes of this slowdown have been the extent of the economic effects of the Delta surge and the extent of supply constraints, both of which had larger effects than I and most forecasters expected. That was due to both the disappointingly low levels of vaccination in some areas and how highly contagious Delta proved to be. Meanwhile, we have seen labor shortages in many regions and many sectors that seem unwarranted given the level of unemployment and other indicators of slack in the labor market. And supply constraints have been very widespread, with many causes, only some of them directly related to COVID-19. U.S. imports have been disrupted both at the point of export and at U.S. ports, with backups at major ports larger than some have ever experienced. Thus, a lack of inputs and a lack of labor to use them have created a dramatic headwind for GDP.

Fortunately, there is already evidence that the Delta surge has begun to wane and, with the reopening of schools (and the expectation that they will remain open in most areas), that the worst effects of Delta, medically and economically, may be behind us. Likewise, fears that Delta would lead health officials to mandate more severe business restrictions have not materialized. Furthermore, the spread of the Delta variant has raised vaccination rates even in areas where they had been low, which will help contain the spread of the Delta variant.

All of this recent experience encourages me to believe that the moderation in the expansion of economic activity in recent months that is directly related to the Delta surge will be a temporary phenomenon. I expect that this slowdown has only delayed the economic recovery into the first half of 2022, and thus I moved what I thought would be strong growth in the second half of this year into the first half of next year. This delay means that my medium-term outlook for economic growth really has not changed much at all, and that I forecast the strong recovery will continue.

The Labor Market Is Healing

Let me now turn to the recent job reports. For the month of August, I and many forecasters expected the economy would create 700,000 jobs or more, but the initial number came in at a disappointing 235,000. Hopes turned to September, but that report disappointed as well, with 194,000 jobs created. Despite these unexpectedly low numbers, there is still some good news from the September report—namely, that the disappointing number was due to unexpected declines in employment by state and local governments that may be attributed to limited labor supply that will work itself out in coming months. Private payrolls increased a healthy 317,000 jobs in September, and the July and August payrolls were revised up by 169,000 jobs.

Nevertheless, the numbers are concerning, given that as many as 8 million workers may have rolled off unemployment insurance programs in September. It is difficult to imagine that, going forward, these workers will continue to remain on the sidelines. This suggests we may be in for very healthy job gains in the last quarter of this year as these workers begin to fill the enormous number of available jobs.

The September jobs report also showed the unemployment rate falling four-tenths of 1 percent, from 5.2 percent to 4.8 percent. It is striking that, in 16 months, the unemployment rate has fallen from 14.8 percent in April 2020 to just 4.8 percent now. So we are clearly most of the way back to the very strong labor market that we achieved before the pandemic. However, one data series, such as the unemployment rate, is insufficient at capturing the overall status of the labor market. Our assessment of the labor market must be broad based, which is why I look at more comprehensive measures of labor market health. Two that I find particularly useful are the Atlanta Fed's labor market distributions spider chart and the Kansas City Fed's Labor Market Conditions Indicators.[2] The Kansas City chart nicely condenses 24 different measures of the labor market, and the index is now above its long-run historical value. The Atlanta Fed spider chart shows where each of 15 labor market indicators sits relative to different dates, such as February 2020 and September 2021. The spider chart reveals that 9 of the 15 indicators, including those for wages and job openings, are either better than February 2020 or nearly as good. Consequently, both broad measures of labor market performance reveal a significant degree of healing in the U.S. labor market.

Now let me focus on the Federal Reserve's goals for monetary policy. As the minutes of the September Federal Open Market Committee (FOMC) meeting conveyed, many participants judge that we have achieved substantial progress on our inflation goal.[3] With regard to substantial further progress on our employment objective, I believe we have now met that criterion despite the disappointing jobs reports for August and September. We lost 22 million jobs during the early months of the pandemic recession. Two million of those jobs are likely gone forever due to early retirements. We have now regained approximately 17 million of those jobs, or 85 percent of what was lost after adjusting for early retirements. Furthermore, the September unemployment rate of 4.8 percent is not that far from the 3.5 percent unemployment rate that was realized in February 2020.

In summary, the labor market has experienced a healthy recovery, but it is not fully healed. While there is still room to improve on the employment leg of our mandate, I believe we have made enough progress such that tapering of our asset purchases should commence following our next FOMC meeting, which is in two weeks.

Inflation

Inflation has been running higher this year than I and most forecasters expected. It has not been high for just a month or two—it has been high all year. It is important to acknowledge that. The unexpected inflation we have observed has raised costs for households and businesses and complicated their planning, which has a real effect on people's lives. For the Fed, the question is whether higher inflation this year undermines moving toward our economic goals. On that score, I continue to believe that the escalation of inflation will be transitory and that inflation will move

back toward our 2 percent target next year. That said, I am still greatly concerned about the upside risk that elevated inflation will not prove temporary.

We *have* seen substantial increases in many prices. Lumber prices skyrocketed through May but have largely retraced that increase in the past few months. Prices for used cars rose substantially from mid-2020 to mid-2021 but now seem to have stabilized at this higher level. At present, I am closely watching prices for housing services (rent and owners' equivalent rent), which saw modest increases last year but have picked up recently. In addition, energy prices have moved up noticeably in recent months, and market conditions suggest risk of further increases.

As I said earlier, I still see supply and demand working here to moderate price increases so that inflation moves back toward 2 percent. But I also see some upside pressures on inflation that bear watching. Bottlenecks have been worse and are lasting longer than I and most forecasters expected, and an important question that no one knows the answer to is how long these supply problems will persist. Through our business contacts, we continue to hear stories about bottlenecks at almost every stage of production and distribution—for example, plants that shut down because of a shortage of one or more crucial inputs; a poor cotton crop in the United States due to weather, which is driving up prices; and clogged ports and trucker shortages. Meanwhile, wage gains have been strong. That apparently has not made its way into prices yet, but how long before it becomes a factor driving inflation? Firms are reporting that they have more pricing power now than they have had in many years, as consumers seem to be accepting higher prices.

The simple answer is that I believe the next few months will be crucial to understanding whether elevated rates of inflation last and if that will trigger a lasting effect on the U.S. economy. We will know more as time goes on about whether inflation in the prices of those goods and services will level off or even fall, as lumber prices have, and how other prices will evolve. But, importantly, we will also know whether this period of higher inflation has started to affect expectations of future inflation.

A critical aspect of our new framework is to allow inflation to run above our 2 percent target (so that it averages 2 percent), but we should do this only if inflation expectations are consistent with our 2 percent target. If inflation expectations become unanchored, the credibility of our inflation target is at risk, and we likely would need to take action to re-anchor expectations at our 2 percent target.

This raises a couple of key questions: Whose inflation expectations do we examine, and how do we determine if they are unanchored? With regard to the first question, we measure inflation expectations two ways. First, we survey the public and ask them what they expect the inflation rate to be in coming years. The University of Michigan household survey and the New York Fed's Survey of Consumer Expectations are examples of this "survey approach." Second, we can infer inflation expectations from differences in yields between Treasury securities that are indexed for inflation and those that are not. These breakeven inflation measures from the Treasury Inflation-Protected Securities market are referred to as "market based" measures of inflation compensation.

Survey measures give us an idea of what the average household expects inflation to be in the coming years. Presumably, this measure of expectations is important because it should influence households' wage demands as they seek compensation for an increasing cost of living. A key drawback of these measures is that the respondent incurs no benefit or cost from the accuracy of their forecast. This is why I have always preferred market-based measures of inflation expectations, because they are formed by investors who are betting with real money about future inflation. In short, they have skin in the game.

This brings us to another question: Are inflation expectations anchored around our inflation target

of 2 percent? Survey measures have shown a dramatic increase in inflation expectations over the past few months. The recent New York Fed measure has short- and medium-term inflation expectations at 5.3 percent and 4.2 percent, respectively. This is eye opening and a genuine cause for concern should households embed these expectations in wage demands. However, market-based measures of inflation expectations and the five-year inflation expectations from the New York Fed survey continue to be anchored near our 2 percent target. I also look at the Board of Governors staff's common inflation expectations measure, which distills a signal from both surveys and market-based inflation gauges. At this point, at least, it remains near its average over the past decade. This gives me some comfort that the recent run of high inflation readings has not led to an unanchoring of inflation expectations. It is important to account for all measures of inflation expectations and not "cherry pick" the measure that one finds most comforting.

I would like to follow up on this last point as it pertains to thinking about inflation. As I mentioned earlier, a lot of commentators, including me, have deflected concerns about high inflation readings being the result of "outliers" or "idiosyncratic" price movements. As a result, recent high inflation readings are transitory and not broad based. But there is a fallacy in doing so that one should avoid in judging whether higher inflation is indeed transitory.

A basic tendency of statistical analysis is to exclude outlying or more volatile data. There are sound reasons for this, such as when we exclude volatile food and energy prices to get a measure of "core" inflation; that kind of measure often is more stable and can tell us whether the underlying forces behind inflation are moving as rapidly as it might seem from headline inflation. A similar logic applies to trimmed mean measures of inflation, such as the Cleveland Fed trimmed mean consumer price index and the Dallas Fed trimmed mean PCE (personal consumption expenditures) inflation rate. These measures censor the tails of the price change distribution to avoid having average inflation distorted by extreme price movements. However, inflation is distilled from many prices, and those prices do not move uniformly. As a result, we may be led to "falsely" dismiss certain price movements and risk being misled as to the true inflation rate.

Let me use a simple example to illustrate this point. Consider a three-good economy with goods A, B and C, and look at how their prices increase over time. In one world, the price of each good goes up 2 percent every year. Thus, average inflation is 2 percent every year, and there is no reason to question that measure, as it is broad based. This is typically what we have in mind when we think about trend inflation. In this world, inflation is meeting the FOMC's 2 percent target and there is no need for a policy change.

Now consider a world in which there are sharp price changes that are staggered across the goods. In year 1, the price of good A goes up 5 percent, while the price of goods B and C increase 2 percent. If we assume equal weights for each good, the inflation rate for this economy is 3 percent. This repeats in year 2, with the price of good B increasing 5 percent while the other two have increases of 2 percent. In year 3, good C sees the largest increase. In this economy, inflation averages 3 percent each year, which is above the FOMC's 2 percent inflation target.

Now, one could look at this data and manipulate it in several common ways. First, if one used a trimmed-mean measure of inflation, you would throw out the highest and the lowest readings for each year. What do you get? The average inflation rate would be 2 percent every year. Thus, over a three-year period, a trimmed mean measure of inflation would be 2 percent and indicate we are hitting our inflation target when the true measure would be 3 percent per year.

A second way of manipulating the data is to say in year 1, "Look, inflation is being driven by good A, which had an idiosyncratic, outsized price increase. If you throw it out, the underlying inflation rate is 2 percent." Then in year 2, you say, "Good B had an idiosyncratic price increase, so throw it out." Repeat for year 3. Again, by selectively throwing out unusually high price increases for individual goods, you would conclude that inflation over the three-year period is 2 percent and we

are hitting the inflation target when, in fact, it was 3 percent.

Third, one can justify throwing out good A in the first year by saying it did not reflect a broad-based price increase—the prices of 67 percent of the goods rose 2 percent. So, based on these goods, we are hitting our inflation target. You would be correct but, again, misguided.

Finally, one could claim, correctly, that the large price increase for good A is "transitory"—it went up strikingly in year 1 but then dropped back, meaning inflation should fall back to our inflation target in coming periods. But that will mislead you in terms of understanding the true inflation rate, because you are putting zero probability that a large spike in inflation will happen to another good in the future.

The moral of this little example is that one needs to be careful when selectively ignoring data series—be it used car prices, food and energy prices, or household surveys of inflation expectations. All of these series convey important information about the evolution of inflation, and one should exhibit caution in dismissing data as outliers. We must keep our eyes open to inflationary pressures, wherever they come from, with consistency and rigor and stand ready to adjust policy if we conclude that such a change is warranted.

This brings me to how I believe monetary policy should evolve in the coming months, based on the outlook I have described. The near-term decision we face is when to begin slowing the pace of asset purchases, which have each month been adding to the level of financial accommodation provided by the Fed to support the economy. Our test for this step was making "substantial further progress" toward our employment and inflation goals. After years of running below 2 percent, the recent and sustained increase in inflation clearly represents substantial progress toward our goal. And the continued gains in employment, despite a couple of months of a slowdown, along with results across a range of labor market indicators, indicate to me that there has also been substantial further progress toward maximum employment. I support the FOMC beginning to reduce asset purchases following our meeting in November. Importantly, this action should not tighten financial conditions, since a later 2021 tapering has already been priced in by most participants.

One issue on which we should also be clear is the pace of tapering. I have said in the past that I favor a pace of tapering that would result in the end of asset purchases by the middle of 2022. Of course, if economic conditions and the outlook were to deteriorate significantly, we could slow or pause this tapering. And if the economy were to strengthen more than expected, the plan to rapidly end purchases would provide policy space in 2022 to act sooner than now anticipated to begin raising the target range for the federal funds rate.

Based on my outlook for the economy, however, I do not expect liftoff to occur soon after tapering is completed. The two policy actions are distinct. I believe the pace of continued improvement in the labor market will be gradual, and I expect inflation will moderate, which means liftoff is still some time off.

That said, as I mentioned earlier, if my upside risk for inflation comes to pass, with inflation considerably above 2 percent well into 2022, then I will favor liftoff sooner than I now anticipate. A major consideration will be my judgment about whether inflation expectations are at risk of becoming "unanchored"—rising substantially and persistently above 2 percent. My FOMC colleagues and I will be watching all of the data carefully in the coming weeks and months and will adjust policy as needed to help ensure the U.S. economy continues to recover from the effects of COVID, and that we continue to make progress toward our economic goals.

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[1] These views are my own and do not represent any position of the Board of Governors or other Federal Reserve policymakers. Return to text

[2] The Atlanta Fed's spider chart and the Kansas City Fed's measure of labor market conditions can be found on

the Reserve Banks' respective websites at www.atlantafed.org/chcs/labor-market-distributions and www.kansascityfed.org/data-and-trends/labor-market-conditions-indicators. Return to text

[3] The minutes of the September 2021 FOMC meeting are available on the Board's website at www.federalreserve.gov/monetarypolicy/fomccalendars.htm. Return to text