

Adriana D Kugler: The outlook for the economy and monetary policy

Speech by Ms Adriana D Kugler, Member of the Board of Governors of the Federal Reserve System, at the Weidenbaum Center on the Economy, Government, and Public Policy, Washington University in St. Louis, St. Louis, Missouri, 3 April 2024.

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Thank you, Andrew, and thank you for the opportunity to speak here today.¹ I am very pleased to be talking here at the Weidenbaum Center. As an economist currently working on policy, but with a long trajectory in research, I particularly appreciate the center's multidisciplinary approach to building bridges between these two applications of economics.

The Federal Open Market Committee (FOMC) has been working to lower inflation in the context of our dual mandate of maximum employment and price stability. Today I will discuss economic developments in the U.S. and how I view the current stance of monetary policy in light of recent data and longer-run trends. Since I am an economist, you will not be surprised that I will talk about recent economic developments by highlighting the dynamics of supply and demand.

As you all know, inflation began to rise in 2021. By mid-2022, 12-month inflation, based on the personal consumption expenditures (PCE) price index, was around 7 percent—much too high and far above the FOMC's 2 percent longer-run objective. But since that time, PCE inflation has slowed significantly, declining to 5.4 percent at the end of 2022, then to 2.6 percent at the end of 2023, and then to 2.5 percent in February.

Inflation can sometimes be hard to read from overall PCE inflation figures due to the volatility of food and energy prices. For that reason, it is sometimes helpful to focus on "core" PCE inflation, which excludes those categories and is a better guide to the direction of inflation. Core PCE inflation peaked at a rate above 5-1/2 percent in early 2022 but fell rapidly during 2023. In fact, the core PCE disinflation we saw last year was the fastest since the early 1980s. The progress has sometimes been bumpy from month to month, and, indeed, January and February of this year showed a bit of firming in the inflation data. But the January numbers, in particular, featured some atypical or seasonal factors that suggest a need to withhold judgment. The 12-month core PCE rate now stands at 2.8 percent. That rate represents considerable progress, but it is still meaningfully above the FOMC's 2 percent target.

I like to think about core PCE inflation in terms of three main components: goods, housing services, and non-housing services. Twelve-month inflation for core goods peaked first, reaching about 7-1/2 percent in early 2022. But goods inflation cooled quickly, and in February goods prices were nearly half a percentage point below their level a year ago. Services inflation peaked later and has cooled less quickly. Within services, housing services—a measure of the cost of rent, and the equivalent for owner-occupied housing—rose above 8 percent early last year but was 5.8 percent in February. Housing services inflation is naturally persistent because tenant rents often have year-long lease agreements, and estimates of owner-occupied housing costs are imputed based in large part using those tenant rents. Data on new tenant rent agreements

suggest that housing inflation broadly will continue to cool. Finally, inflation in core non-housing services hovered between 4-1/2 and 5-1/2 percent from mid-2021 through mid-2023 but began cooling after that, reaching 3.3 percent in February. Continued disinflation will indeed require further progress in housing and non-housing services.

The rise and subsequent easing of inflation in recent years were related to both supply and demand factors. This development has been confirmed by granular, "bottom-up" statistical research looking at price and quantity changes within narrow product categories. Roughly speaking, if a price goes up while quantity goes down, that is an indication that a negative supply shock is dominating; if price and quantity move in the same direction, that is an indication that a demand shock is dominating. Research using this method finds that, for the economy broadly, demand shocks accounted for roughly two-thirds of the 2021 pickup in, and 2023 slowing of, core PCE inflation, with the remaining one-third related to supply. The role of supply is somewhat larger in a narrower analysis focused on the domestic manufacturing sector.² "Top-down" research looking at aggregate time-series data also found significant contributions for both supply and demand factors.³

Let me be a bit more concrete about this point by discussing supply and demand for goods and services in turn. Supply in some goods-producing industries, like motor vehicles, was held down for some time by pandemic-related plant shutdowns, shortages, and transportation bottlenecks. And demand for goods surged during the pandemic when consumers shied away from in-person services. Businesses frequently highlighted shortages of materials as having held down production during the period when supply was tight and demand was strong. Those pressures have eased considerably (though perhaps not completely). Supply chains and production have largely recovered, and there are signs that goods demand growth since then has eased. For example, the share of consumer spending devoted to goods rather than services has moved back closer to its pre-pandemic trend after rising sharply in 2020.

Regarding services, particularly non-housing services, the most important input to services production tends to be labor.⁴ For that reason, it is useful to talk about supply and demand for labor. Labor supply was held down significantly in the early stages of the pandemic as workers voluntarily and, in some cases, involuntarily stayed out of the workforce. Older workers, in particular, left the labor force in a wave of early retirements, and, tragically, COVID-19 caused a rise in mortality. Additionally, many prime-age workers—those between the ages of 25 and 54—stayed out of the labor market for a time, perhaps because of health concerns or family care challenges. And immigration was relatively low during the pandemic.

But labor supply has been recovering. While most older individuals have not, as a whole, returned to the labor force, many prime-age workers have. Prime-age women, in particular, have significantly increased their labor force participation, which reached an all-time high last year and remains close to that all-time high. Moreover, the Congressional Budget Office (CBO) estimates that net immigration increased to above 2-1/2 million in 2022 and 3-1/2 million in 2023. If the CBO analysis is correct, population growth has been a sizable contributor to overall labor force growth.

A more subtle source of labor supply improvement has been improved quality of matches between workers and firms—how well suited particular workers are, by talent,

experience, and preferences, to their employers. In the wake of, and until the end of, the pandemic, we saw a heightened pace of workers quitting their jobs and finding new ones, a process that economists generally believe improves matches. Indeed, evidence suggests workers and firms have been fairly efficient at finding each other over the past couple of years.⁵ High-quality job matches act like additional labor supply: Both firms and workers are likely to be more productive when workers' skills and preferences are a good match for their employers' needs.

On the demand side, labor demand was strong in 2021 and 2022. Demand was so strong, in fact, that the job openings rate—that is, the monthly number of job openings relative to total employment—ran almost 50 percent above its pre-pandemic record all the way from July 2021 through July 2022.⁶

But the job openings rate has declined roughly 30 percent from its peak, a sign that labor demand—while still robust—has cooled significantly. So the labor market has moved into better balance.

Importantly, given the strong labor supply growth, supply–demand imbalances can continue to ease even amid a solid pace of net job growth, as we have been seeing. Indeed, I suspect that strong population growth helps resolve the puzzle that forecasters have faced over the past year, in which measures of labor market growth—and growth of other economic variables, like consumption—have been solid even amid easing inflation.⁷

As labor markets have moved into better balance, wage growth has cooled—which means that increases in the main cost business in the services sector have slowed, easing inflationary pressures. Workers and families do not reap the benefit of higher wages if those gains are eaten up by inflation. For that reason, it is important that wage growth be consistent with 2 percent inflation over time. The U.S. economy is moving back toward that kind of wage growth, including in services industries: The 12-month growth of average hourly earnings in private services has come down to about 4 percent from a peak pace above 6 percent in early 2022. And despite the cooling of wage growth, with inflation easing over the past year, we have seen broader wage increases again outpacing price gains, that is, real wage gains.

But you may ask: What role has the FOMC played in all of this? While supply conditions are beyond the control of monetary policymakers, the FOMC can influence the pace of inflation by tightening monetary policy to slow the growth of aggregate demand. The FOMC began raising its policy interest rate in early 2022 and proceeded expeditiously. These actions have damped aggregate demand, with the most pronounced effects on interest rate–sensitive sectors. For example, in 2023, the level of residential investment was about 19 percent below its 2021 level, reflecting a much lower pace of home purchases. And business investment in machines has seen somewhat tepid growth lately, even contracting a bit last year, though I note that the construction of new factories has been surging, perhaps partly related to recent legislation, which will boost supply over the longer run. More broadly, financial conditions have been a drag on aggregate demand, as suggested by the Federal Reserve Board's FCI-G (Financial Conditions Impulse on Growth) index, which estimates the overall effect on gross domestic product (GDP) of changes in financial conditions, including interest rates, asset prices, and exchange rates. This measure moved well into restrictive territory in

mid-2022 and remained quite restrictive for some time, though it has become less restrictive recently.

In addition to the direct actions taken to tighten monetary policy, the FOMC has also helped cool inflation through its communication with the public. In particular, the FOMC's stated commitment to bring inflation back to 2 percent, coupled with its actions to tighten policy, has helped ensure that longer-term inflation expectations remain anchored—that is, that households and firms believe that inflation will return to the Committee's target. Anchored expectations are evident in surveys of consumers conducted by the University of Michigan and the New York Fed. Separately, a Richmond Fed survey shows a close relation between firms' expectations of overall inflation and their own price-setting plans. As the effects of earlier supply and demand shocks fade, firms with anchored inflation expectations will bring their price-setting decisions back into alignment with the FOMC's inflation target. One way they might do so is by adjusting their prices less frequently. Before the pandemic, the typical price lasted more than 10 months, but by early 2022, it was lasting fewer than 5 months while inflation was near its recent peak. Since then, the frequency of price adjustments has slowed considerably, and by the fourth quarter of last year, the typical price was lasting more than 7 months.⁸

Let me now turn to the outlook for this year. Given my thinking about the role of supply and demand in recent inflation dynamics, as well as the role anchored inflation expectations are playing in bringing price-setting behavior back to normal, I expect the disinflationary trend to continue.

There is still a bit of room for further supply improvement, especially in the services sector, where solid labor supply growth will continue to ease wage and inflation pressures.

On the demand side, I expect consumption growth to slow some this year, as households have drawn down large balances of excess savings accumulated during the pandemic and are facing restrictive financial conditions. We may already be seeing some of that slowing; consumer spending was soft in January and February, on average, suggesting that we are on track for lower consumption growth in the first quarter than we saw during the second half of last year.

With less support from consumers, I expect GDP growth this year to be solid but slower than last year's strong 3.1 percent pace. Even with demand growth cooling, given the backdrop of solid supply, my baseline expectation is that further disinflation can be accomplished without a significant rise in unemployment.

That said, the future is uncertain, and I am attentive to risks—both upside risks to my inflation outlook and downside risks to the outlook for economic activity. For upside risks, global developments such as the wars in Europe and the Middle East could spark an increase in commodity prices or further disruptions to shipping networks. The tragic recent bridge collapse in Baltimore and effects on the Port of Baltimore could also pose some risk, though it appears that shipping networks are adapting. Additionally, consumption growth could turn out to be stronger than expected, particularly because of the wage gains we have seen across all income groups—but especially among the lowest earners who have an especially high propensity to spend out of their income.⁹

Indeed, consumption was surprisingly strong last year and made solid contributions to GDP growth in the third and fourth quarters, though some of that strength may have been related to strong population growth which, more generally, was likely disinflationary.

But there are also downside risks to economic activity. Measures of consumer credit delinquencies have been on the rise, which might point to a more significant slowing of consumer spending than expected. And labor markets can sometimes deteriorate very quickly, without much warning in closely watched spending data. The February employment report featured a rise in the unemployment rate, half of which was accounted for by layoffs. I study a range of layoff indicators, both in the official data and in measures based on information contained in publicly traded firms' earnings reports or Google searches, and I will continue to watch a whole range of indicators closely.

Finally, let me briefly discuss monetary policy. As I have noted, policy is currently restrictive, and my baseline expectation is that disinflation will continue without a broad economic slowdown-though such an outcome is not assured.

In considering the appropriate path of monetary policy, I am guided by the FOMC's dual mandate of maximum employment and price stability. After the March FOMC meeting, the Committee said that it "does not expect it will be appropriate to reduce the target range until it has gained greater confidence that inflation is moving sustainably toward 2 percent."¹⁰ After that meeting, we also published the Summary of Economic Projections, which summarizes the forecasts of FOMC participants. Most FOMC participants expect that it will be appropriate to begin lowering the federal funds rate sometime this year. My own expectation is consistent with that; if disinflation and labor market conditions proceed as I am currently expecting, then some lowering of the policy rate this year would be appropriate.

However, I will remain attentive to the totality of the data and be prepared to change my economic and policy outlook if conditions change.

¹ The views expressed here are my own and are not necessarily those of my colleagues on the Federal Reserve Board or the Federal Open Market Committee.

² For explaining core PCE inflation generally, see Adam Hale Shapiro (2022), "Decomposing Supply and Demand Driven Inflation," Working Paper Series 2022-18 (San Francisco: Federal Reserve Bank of San Francisco, October; revised February 2024), available at <https://doi.org/10.24148/wp2022-18>. With regard to the manufacturing sector specifically, recent work by the Federal Reserve Board staff focused on manufacturing production and producer price indexes and used additional supply information from the Census Bureau's Quarterly Survey of Plant Capacity Utilization. That research found a roughly 50–50 split between supply and demand. See Robin Braun, Aaron Flaaen, and Sinem Hacıoglu Hoke (2024), "[Supply vs Demand Factors Influencing Prices of Manufactured Goods](#)," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, February 23).

³ See Olivier J. Blanchard and Ben S. Bernanke (2023), "[What Caused the U.S. Pandemic-Era Inflation?](#)" NBER Working Paper Series 31417 (Cambridge, Mass.: National Bureau of Economic Research, June).

⁴ For example, labor costs are more than 80 percent of value-added in education and health services and nearly 60 percent in leisure and hospitality services. See Bureau of Economic Analysis (2023), "[Interactive Data](#)," tables on composition of gross output by industry, December.

⁵ For example, one popular measure of "matching efficiency" shows an initial decline early in the pandemic but a robust recovery to pre-pandemic levels. See Simon Mongey and Jeff Horwich (2023), "[Are Job Vacancies Still as Plentiful as They Appear? Implications for the 'Soft Landing'](#)" (Minneapolis, Minn.: Federal Reserve Bank of Minneapolis, December 1).

⁶ The data are from the Bureau of Labor Statistics Job Openings and Labor Turnover Survey. The pre-pandemic record job openings rate was 4.8 percent in late 2018 and early 2019. The rate averaged 7.1 percent from July 2021 through July 2022. The absolute peak job openings rate was 7.4 percent in March 2022.

⁷ For an analysis of the implications of CBO population estimates for labor markets and consumer spending, see Wendy Edelberg and Tara Watson (2024), "New Immigration Estimates Help Make Sense of the Pace of Employment" (Washington: Hamilton Project, Brookings Institution, March 7), available at <https://www.brookings.edu/articles/new-immigration-estimates-help-make-sense-of-the-pace-of-employment>.

⁸ These facts are from Hugh Montag and Daniel Villar (2023), "[Price-Setting during the Covid Era](#)," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, August 29). I thank the authors for providing me with updated data through 2023:Q4.

⁹ Since the pandemic, workers at the low end of the wage distribution have seen the strongest wage growth, which is apparent in the Atlanta Fed's Wage Growth Tracker. For a discussion, see the recent [Monetary Policy Report \(PDF\)](#): Board of Governors of the Federal Reserve System (2024), *Monetary Policy Report* (Washington: Board of Governors, March).

¹⁰ See the March 2024 FOMC statement, available on the Board's website at <https://www.federalreserve.gov/monetarypolicy/fomccalendars.htm> (quoted text in paragraph 3).