Minutes of the Federal Open Market Committee September 20–21, 2022

A joint meeting of the Federal Open Market Committee and the Board of Governors of the Federal Reserve System was held in the offices of the Board of Governors on Tuesday, September 20, 2022, at 1:00 p.m. and continued on Wednesday, September 21, 2022, at 9:00 a.m.¹

Attendance

Jerome H. Powell, Chair John C. Williams, Vice Chair

Michael S. Barr

Michelle W. Bowman

Lael Brainard

James Bullard

Susan M. Collins

Lisa D. Cook

Esther L. George

Philip N. Jefferson

Loretta J. Mester

Christopher J. Waller

Charles L. Evans, Patrick Harker, Neel Kashkari, Lorie K. Logan, and Helen E. Mucciolo, Alternate Members of the Committee

Thomas I. Barkin, Raphael W. Bostic, and Mary C. Daly, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively

James A. Clouse, Secretary

Matthew M. Luecke, Deputy Secretary

Brian J. Bonis, Assistant Secretary

Michelle A. Smith, Assistant Secretary

Mark E. Van Der Weide, General Counsel

Trevor A. Reeve, Economist

Stacey Tevlin, Economist

Beth Anne Wilson, Economist

Shaghil Ahmed, Joseph W. Gruber, Carlos Garriga, and William Wascher, Associate Economists

Patricia Zobel,² Manager pro tem, System Open Market Account David Altig, Executive Vice President, Federal Reserve Bank of Atlanta

Kartik B. Athreya, Executive Vice President, Federal Reserve Bank of Richmond

Penelope A. Beattie,³ Section Chief, Office of the Secretary, Board

James P. Bergin, Deputy General Counsel, Federal Reserve Bank of New York

Camille Bryan, Senior Project Manager, Division of Monetary Affairs, Board

Michele Cavallo, Principal Economist, Division of Monetary Affairs, Board

Stephanie E. Curcuru, Deputy Director, Division of International Finance, Board

Marnie Gillis DeBoer, Senior Associate Director, Division of Monetary Affairs, Board

Sarah Devany, First Vice President, Federal Reserve Bank of San Francisco

Michael Dotsey, Executive Vice President, Federal Reserve Bank of Philadelphia

Burcu Duygan-Bump, Special Adviser to the Board, Division of Board Members, Board

Rochelle M. Edge, Deputy Director, Division of Monetary Affairs, Board

Matthew J. Eichner, Director, Division of Reserve Bank Operations and Payment Systems, Board

Jon Faust, Senior Special Adviser to the Chair, Division of Board Members, Board

Andrew Figura, Associate Director, Division of Research and Statistics, Board

Jose Acosta, Senior Communications Analyst, Division of Information Technology, Board

¹ The Federal Open Market Committee is referenced as the "FOMC" and the "Committee" in these minutes; the Board of Governors of the Federal Reserve System is referenced as the "Board" in these minutes.

² In the absence of the manager, the Committee's Rules of Organization provide that the deputy manager acts as manager pro tem.

³ Attended Tuesday's session only.

⁴ Attended through the discussion of developments in financial markets and open market operations.

- Glenn Follette, Associate Director, Division of Research and Statistics, Board
- Joshua Gallin, Senior Special Adviser to the Chair, Division of Board Members, Board
- Michael S. Gibson, Director, Division of Supervision and Regulation, Board
- Luca Guerrieri, Deputy Associate Director, Division of Financial Stability, Board
- Diana Hancock, Senior Associate Director, Division of Research and Statistics, Board
- Valerie S. Hinojosa, Section Chief, Division of Monetary Affairs, Board
- Matteo Iacoviello, Senior Associate Director, Division of International Finance, Board
- Jane E. Ihrig, Special Adviser to the Board, Division of Board Members, Board
- Callum Jones, Senior Economist, Division of Monetary Affairs, Board
- Edward S. Knotek II, Senior Vice President, Federal Reserve Bank of Cleveland
- Sylvain Leduc, Executive Vice President, Federal Reserve Bank of San Francisco
- Andreas Lehnert, Director, Division of Financial Stability, Board
- Paul Lengermann, Assistant Director, Division of Research and Statistics, Board
- Kurt F. Lewis, Special Adviser to the Board, Division of Board Members, Board
- Dan Li, Assistant Director, Division of Monetary Affairs, Board
- Laura Lipscomb, Special Adviser to the Board, Division of Board Members, Board
- David López-Salido, Senior Associate Director, Division of Monetary Affairs, Board
- Jonathan P. McCarthy, Economic Research Advisor, Federal Reserve Bank of New York
- Ann E. Misback, Secretary, Office of the Secretary, Board

- Michelle M. Neal, Head of Markets, Federal Reserve Bank of New York
- Edward Nelson, Senior Adviser, Division of Monetary Affairs, Board
- Giovanni Olivei, Senior Vice President, Federal Reserve Bank of Boston
- Anna Paulson, Executive Vice President, Federal Reserve Bank of Chicago
- Karen M. Pence,⁵ Deputy Associate Director, Division of Research and Statistics, Board
- Andrea Raffo, Senior Vice President, Federal Reserve Bank of Minneapolis
- Linda Robertson, Assistant to the Board, Division of Board Members, Board
- Jeremy B. Rudd, Senior Adviser, Division of Research and Statistics, Board
- Achilles Sangster II, Senior Information Manager, Division of Monetary Affairs, Board
- John W. Schindler, Special Adviser to the Board, Division of Board Members, Board
- Samuel Schulhofer-Wohl, Senior Vice President, Federal Reserve Bank of Dallas
- Seth Searls,⁴ Associate Director, Federal Reserve Bank of New York
- Nitish R. Sinha, Special Adviser to the Board, Division of Board Members, Board
- John J. Stevens, Senior Associate Director, Division of Research and Statistics, Board
- Annette Vissing-Jørgensen, Senior Adviser, Division of Monetary Affairs, Board
- Jeffrey D. Walker,⁴ Associate Director, Division of Reserve Bank Operations and Payment Systems, Board
- Min Wei, Senior Associate Director, Division of Monetary Affairs, Board
- Paul R. Wood, Special Adviser to the Board, Division of Board Members, Board
- Nathaniel Wuerffel, Head of Domestic Markets, Federal Reserve Bank of New York

⁵ Attended from the discussion of the economic and financial situation through the end of Wednesday's session.

Rebecca Zarutskie, Special Adviser to the Board, Division of Board Members, Board

Andrei Zlate, Group Manager, Division of Monetary Affairs, Board

Developments in Financial Markets and Open Market Operations

The manager pro tem turned first to a discussion of financial market developments over the intermeeting period. U.S. financial conditions tightened over the period, largely reflecting an upward revision in investors' outlook for the path of the policy rate. Treasury yields climbed substantially, with most of the upward move reflected in real yields. Equity prices initially rose amid second-quarter earnings reports that were better than feared but later retraced those gains in response to the shifting policy outlook. Regarding international developments, yields in most advanced foreign economies (AFEs) also rose sharply as a number of other central banks lifted policy rates and indicated in their communications that they would likely continue to tighten monetary policy in order to address inflation pressures. The exchange value of the dollar appreciated notably, reaching multidecade highs in real terms, as market participants perceived mounting economic challenges abroad.

The market-implied path of the federal funds rate shifted sharply higher after market participants interpreted Federal Reserve communications—particularly those provided at the Jackson Hole symposium—along with incoming data, as indicating a more restrictive path of policy than previously expected. Policy-sensitive rates suggested that a 75 basis point increase in the target range for the federal funds rate was widely expected to be decided on at the Committee's September meeting, with some chance of a 100 basis point move. In addition, the market-implied path suggested reasonable odds of additional 75 basis point and 50 basis point rate increases at the November and December meetings, respectively. Market participants generally anticipated a further slowing in the pace of rate increases after December, with the peak policy rate being reached in the first half of 2023. Beyond that period, the market-implied path of the federal funds rate sloped downward, likely reflecting downside risks to the policy rate path. The median respondent to the Open Market Desk surveys expected the policy rate path to remain flat through 2023 after the peak rate was reached. On average, Desk survey respondents assigned an almost 30 percent probability to a decline in real gross domestic product (GDP) over 2022, nearly double the probability assigned in the July survey.

The manager pro tem turned next to a discussion of policy implementation. Balance sheet runoff had continued to proceed smoothly over the intermeeting period. With caps on redemptions of Treasury securities and agency mortgage-backed securities (MBS) doubling in September, the pace of balance sheet runoff was set to increase over coming months. The markets for Treasury securities and agency MBS continued to function in an orderly manner, though liquidity conditions in both markets remained low, reflecting elevated interest rate uncertainty.

In money markets, the 75 basis point increase in the target range at the July meeting passed through fully to overnight rates. Amid strong demand for short-term investments, take-up at the overnight reverse repurchase agreement (ON RRP) facility was relatively steady at elevated levels.

The staff continued to anticipate that ON RRP take-up would decline in coming quarters from its currently elevated levels as money market participants responded to shifting conditions. Issuance of short-term securities was likely to increase in coming periods, and, as more clarity emerged in the economic and policy outlook, demand for short-term assets could moderate. Both of these developments would ease downward pressure on yields on safe short-term investments. The gradual reduction in ON RRP balances could also be facilitated by rising competition among banks in seeking deposits. The manager pro tem indicated that the staff would continue to monitor money market developments closely in order to assess whether any frictions were emerging in this process.

The manager pro tem concluded with an update on operational matters. As expected, Federal Reserve net income turned negative in September. The staff expected that the size of the associated deferred asset would increase over time until net income turned positive, likely in a few years. The Desk planned to begin aggregation of those agency MBS held in the System Open Market Account (SOMA) that are not eligible to be commingled into Uniform MBS and, specifically, the Freddie Mac MBS that were issued before June 2019 and have a 45-day payment delay; decisions about any additional aggregations would be made at a later date.

By unanimous vote, the Committee ratified the Desk's domestic transactions over the intermeeting period. There were no intervention operations in foreign currencies for the System's account during the intermeeting period.

Staff Review of the Economic Situation

The information available at the time of the September 20–21 meeting suggested that U.S. real GDP was increasing at a modest pace in the third quarter after having declined over the first half of the year. Labor demand remained strong, and the labor market continued to be very tight. Recent monthly readings indicated that consumer price inflation—as measured by the 12-month percentage change in the price index for personal consumption expenditures (PCE)—remained elevated.

Total nonfarm payroll employment posted robust gains in July and August at an average pace that was only slightly below what was seen over the first half of the year. The unemployment rate edged up, on net, from 3.6 percent in June to 3.7 percent in August. The unemployment rate for African Americans increased over this period, while the rate for Hispanics moved up slightly on net; both rates were noticeably higher than the national The labor force participation rate and employment-to-population ratio both rose, on net, from June to August. The private-sector job openings rate, as measured by the Job Openings and Labor Turnover Survey, moved slightly lower from May to July but remained at a high level. Nominal wage growth continued to be rapid and broad based: Average hourly earnings rose 5.2 percent over the 12 months ending in August, while the employment cost index of hourly compensation in the private sector, which also includes benefit costs, rose 5.5 percent over the 12 months ending in June, 2.4 percentage points faster than the year-earlier pace.

Consumer price inflation remained elevated. Total PCE price inflation was 6.3 percent over the 12 months ending in July, and core PCE price inflation, which excludes changes in consumer energy prices and many consumer food prices, was 4.6 percent over the same period. The trimmed mean measure of 12-month PCE price inflation constructed by the Federal Reserve Bank of Dallas was 4.4 percent in July. In August, the 12-month change in the consumer price index (CPI) was 8.3 percent, while core CPI inflation was 6.3 percent over the same period. Survey-based measures of short-run inflation expectations declined in recent weeks, while measures of longer-term inflation expectations remained roughly stable or moved lower.

Available spending indicators, including the August retail sales report, suggested that real PCE was on track to post a modest gain in the third quarter. However, the latest housing market data pointed to another sharp contraction in residential investment in the third quarter,

and business fixed investment appeared to be rising at a tepid pace.

Real goods exports stepped up in June and then rose further in July, led by increases in exports of industrial supplies. By contrast, real goods imports stepped down in June and then fell sharply in July, driven by a large decline in consumer goods imports. Exports and imports of services continued to be held back by an incomplete recovery of international travel. The nominal U.S. international trade deficit continued to narrow in June and July. Altogether, net exports contributed positively to GDP growth in the second quarter and appeared on track to make another positive contribution in the third quarter.

Data pointed to weak foreign growth in recent months, weighed down by the global reverberations from Russia's war against Ukraine and a loss of momentum in the Chinese economy. In Europe, further disruptions to the supply of energy exacerbated declines in real disposable incomes and in consumer and business confidence, restraining economic activity. In China, recent indicators suggest only a partial rebound from the effects of earlier severe COVID-19-related lockdowns as well as increasing concerns about the property sector. Weaker growth in China and the broader global economy also weighed on export-oriented emerging market economies in Asia. Consumer price inflation rose further in August in many foreign economies, reflecting past increases in energy and food prices, but also a continued broadening of inflationary pressure to core prices. With inflation persistently high, many central banks continued to tighten monetary policy.

Staff Review of the Financial Situation

Over the intermeeting period, U.S. Treasury yields and the market-implied federal funds rate path moved higher. Broad domestic equity price indexes decreased slightly, on balance, but market volatility remained elevated. Credit remained widely available to most types of borrowers, but increases in borrowing costs appeared to damp the demand for credit in some markets in recent months. Measures of current loan performance for businesses and most households remained generally stable. However, more recently, expectations of future credit quality for businesses deteriorated slightly, and delinquency rates rose for some types of credit owed by households with low credit scores.

The expected path of the federal funds rate—implied by a straight read of financial market quotes—rose in the period since the July FOMC meeting, largely reflecting more-restrictive-than-expected monetary policy communications amid stronger-than-expected economic data and ongoing concerns about high inflation. On net, nominal Treasury yields increased significantly across the maturity spectrum. The increases in nominal Treasury yields were primarily accounted for by rising real yields, while inflation compensation measures declined substantially at short horizons and remained relatively little changed at medium- and longer-term horizons.

Broad equity price indexes decreased slightly, on net, as substantial early gains arising from investors' improved perceptions about the inflation outlook and better-thanfeared second-quarter earnings were more than offset by later losses arising from expectations that the Committee would follow a more restrictive policy than previously expected. One-month option-implied volatility on the S&P 500—the VIX—increased somewhat, on net, and remained elevated by historical norms, partly reflecting investor uncertainty and risks associated with higher inflation and the expected move to a restrictive policy stance. Corporate bond spreads narrowed slightly, on net, and remained roughly at the midpoints of their historical distributions. Reflecting increases in both policy rates and corporate bond spreads, yields on corporate bonds rose significantly since the start of the year. Municipal bond spreads over comparable-maturity Treasury yields widened a touch.

Conditions in short-term funding markets remained stable over the intermeeting period, with the July increase in the Federal Reserve's administered interest rates passing through quickly to other money market rates. Although secured overnight rates firmed slightly later in the intermeeting period, they remained soft relative to the ON RRP offering rate—a configuration that market participants attributed to relatively low Treasury bill supply combined with strong investor demand for shortdated instruments amid uncertainty about the future path of the policy rate. Consistent with continued softness in repurchase agreement rates, daily take-up in the ON RRP facility remained elevated. Spreads on lowerrated short-term commercial paper changed little on net. Bank deposit rates continued to increase modestly in August, following a lagged response to increases in the federal funds rate, while money market mutual funds' net yields rose along with the increases in short-term rates.

Sovereign yields in most AFEs rose notably over the intermeeting period as major central banks raised their policy rates and communicated a tighter stance of future policy in the face of persistent inflationary pressures.

Yields on Japanese government securities, however, ended the period little changed, as the Bank of Japan reaffirmed its accommodative monetary policy stance. Measures of foreign inflation compensation were volatile amid large swings in European natural gas prices but increased moderately on net. The U.S. dollar appreciated further against most major currencies, reaching multi-decade highs against the euro, the British pound, and the Japanese yen. The dollar's strength largely reflected increasing investor concerns about the global growth outlook as well as widening interest rate differentials between the United States and Japan. Growth concerns also weighed on foreign equity prices, which declined moderately. Outflows from funds dedicated to emerging markets continued at a modest pace, and credit spreads in emerging market economies narrowed somewhat on net.

In domestic credit markets, borrowing costs continued to rise over the intermeeting period. Yields on both corporate bonds and institutional leveraged loans increased. Bank interest rates for commercial and industrial (C&I) and commercial real estate (CRE) loans also increased. Among small businesses that borrow on a regular basis, the share of firms facing higher borrowing costs continued to climb through August. Municipal bond yields increased across ratings categories. Borrowing costs for residential mortgage loans increased and reached their highest levels since 2008. Interest rates on most credit card accounts continued to move higher, in line with the rise in the federal funds rate, and auto loan interest rates rose steadily through August.

Credit remained generally available to businesses and households, but high borrowing costs appeared to reduce the demand for credit, resulting in lower financing volumes in some markets. Issuance of nonfinancial corporate bonds slowed further in July from the weak levels seen in the second quarter but rebounded somewhat in August and so far in September. Gross institutional leveraged loan issuance increased modestly in July from subdued levels but continued to be weak in August. Equity issuance remained depressed, while issuance of municipal bonds was sluggish over the summer and so far in September.

According to the July Senior Loan Officer Opinion Survey on Bank Lending Practices, banks tightened credit standards on C&I lending for the first time in two years, but C&I loans on banks' balance sheets expanded at a strong pace in July and August, reflecting strong demand from nonfinancial businesses. CRE loans on banks' bal-

ance sheets also continued to grow robustly, but issuance of commercial mortgage-backed securities (CMBS) slowed in July from its strong pace earlier in the year. Credit availability to small businesses appeared to be tightening somewhat. The share of small firms reporting that it was more difficult to obtain loans continued its upward trend in August but remained lower than its historical average.

Credit in the residential mortgage market remained available for high-credit-score borrowers. Credit availability for low-credit-score borrowers continued to ease through July but remained modestly tight—close to prepandemic averages. However, the volumes of both home-purchase and refinance mortgage originations plunged in July amid rising mortgage rates. Consumer credit remained available to most households in June and July, but about half of the respondents in the Federal Reserve Bank of New York's Survey of Consumer Expectations indicated that it was harder to obtain credit than it was a year earlier and that they expected it to become even harder over the next year.

The credit quality of nonfinancial corporations remained generally strong, with low default rates for both corporate bonds and leveraged loans. The volume of rating upgrades in the corporate bond market outpaced that of downgrades in July and August, but, so far in September, these relative volumes reversed. The volume of rating downgrades in the leveraged loan market continued to exceed that of upgrades. Credit quality for C&I and CRE loans on banks' balance sheets also remained sound, as delinquency rates remained at low levels through June. However, banks increased loan loss provisions somewhat in the second quarter. Delinquency rates on CRE loans securitized into CMBS remained unchanged in July, delinquency rates on small business loans stayed quite low after edging up, and the credit quality of municipal securities remained strong.

Household credit quality stayed broadly solid but continued to worsen for some types of credit owed by borrowers with low credit scores. Mortgage delinquencies trended down in recent months, and the share of mortgages in foreclosure remained low in July. By contrast, credit card and auto credit delinquency rates rose over the second quarter, particularly among subprime borrowers, with subprime auto loan delinquency rates rebounding notably to slightly above their historical averages.

Staff Economic Outlook

The projection for U.S. economic activity prepared by the staff for the September FOMC meeting was slightly weaker than the July forecast. However, the staff's estimate of potential output in recent history was revised down significantly in response to continued disappointing productivity growth and the sluggish gains in labor force participation seen so far this year; moreover, this lower trajectory for potential output was expected to persist throughout the forecast period. As a result, the staff's estimate of the output gap was revised up considerably this year, and while the staff projection still had the output gap closing in coming years, the level of output was expected to be slightly above potential at the end of 2025. Likewise, the unemployment rate was expected to rise more slowly than in the July projection and to be slightly below the staff's estimate of its natural rate at the end of 2025.

On a 12-month change basis, total PCE price inflation was expected to be 5.1 percent in 2022, and core inflation was expected to be 4.3 percent. Although the staff continued to project that core inflation would step down over the next two years—reflecting the anticipated resolution of supply—demand imbalances and a labor market that was expected to become less tight—core inflation was revised up in each year of the projection. In 2025, core inflation was expected to be 2.1 percent. Total PCE price inflation was expected to decline to 2.6 percent in 2023 as core inflation slowed and energy prices declined. Total PCE inflation was expected to move down further in 2024, to 2 percent, and to remain at 2 percent in 2025.

The staff continued to judge that the risks to the baseline projection for real activity were skewed to the downside. In addition to Russia's war in Ukraine, weakening activity abroad, and ongoing supply chain bottlenecks, the possibility that a persistent reduction in inflation could require a greater-than-assumed amount of tightening in financial conditions was viewed by the staff as a salient downside risk to their forecast for real activity. The staff viewed the risks to the inflation projection as skewed to the upside on the grounds that supply conditions might not improve as much as expected and energy prices might rise sharply again. The staff also pointed to the possibility that wage increases could put a greater-thanexpected amount of upward pressure on price inflation and the possibility that inflation expectations could become unanchored given the large rise in inflation seen over the past year as additional upside risks to the inflation forecast.

Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, participants submitted their projections of the most likely outcomes for real GDP growth, the unemployment rate, and inflation for each year from 2022 through 2025 and over the longer run, based on their individual assessments of appropriate monetary policy, including the path of the federal funds rate. The longer-run projections represented each participant's assessment of the rate to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks to the economy. A Summary of Economic Projections was released to the public following the conclusion of the meeting.

In their discussion of current economic conditions, participants noted that recent indicators had pointed to modest growth in spending and production. Job gains had been robust in recent months, and the unemployment rate had remained low. Inflation remained elevated, reflecting supply and demand imbalances related to the pandemic, higher food and energy prices, and broader price pressures. Participants recognized that Russia's war against Ukraine was causing tremendous human and economic hardship. Participants judged that the war and related events were creating additional upward pressure on inflation and were weighing on global economic activity. Against this background, participants remained highly attentive to inflation risks.

With regard to the economic outlook, participants noted that recent data pointed to modest growth in economic activity over the second half of this year. Participants observed that recent indicators of consumer spending and business investment suggested modest increases in those spending categories but noted that activity in interest-sensitive sectors weakened appreciably. Participants revised down their projections of real GDP growth for this year from their projections in June. Several participants noted that the continued strength in the labor market, as well as the data on gross domestic income, raised the possibility that the current GDP data could understate the strength in economic activity this year. Participants generally anticipated that the U.S. economy would grow at a below-trend pace in this and the coming few years, with the labor market becoming less tight, as monetary policy assumed a restrictive stance and global headwinds persisted. Participants noted that a period of below-trend real GDP growth would help reduce inflationary pressures and set the stage for the sustained achievement of the Committee's objectives of maximum employment and price stability.

In their discussion of the household sector, participants noted that consumer spending grew moderately, reflecting strength in the labor market, the elevated level of household savings accumulated during the pandemic, and a strong aggregate household-sector balance sheet. Several participants noted that spending appeared to have held up relatively well, especially among higher-income households. These participants also noted that the composition of spending by low-to-moderate-income households—who were affected to a greater degree by high food, energy, and shelter prices—was changing, with discretionary expenditures being cut and purchases shifting to lower-cost options. Participants observed that the notable slowdown in residential investment and other interest-sensitive spending had continued, reflecting the effect of the Committee's monetary policy actions and tighter financial conditions.

With regard to the business sector, participants observed that growth in investment spending appeared modest. Several participants mentioned that manufacturing activity had slowed. A couple of participants noted that businesses were constrained in undertaking new capital projects, as they faced higher financing costs, persistent challenges associated with supply bottlenecks, and hiring difficulties resulting from the continued tightness of the labor market.

Participants discussed how they perceived challenging supply conditions to be evolving. Many participants remarked that their business contacts were reporting signs of relief in supply bottlenecks, such as declines in shipping costs and delivery times and rising inventories, while several participants saw little improvement in the supply situation. Participants saw supply bottlenecks as likely continuing for a while longer, and a couple commented that constraints on production were increasingly taking the form of labor shortages rather than parts shortages.

Participants observed that the labor market had remained very tight, as evidenced by a historically low unemployment rate, elevated job vacancies and quit rates, a low pace of layoffs, robust employment gains, and high nominal wage growth. A few participants remarked that employers facing particularly acute labor shortages were those associated with professional occupations, service industries, skilled trades, and smaller firms. Some participants noted a number of developments consistent with the labor market moving toward better balance, including a lower rate of job turnover, a moderation in employment growth, and an increase in the labor force participation rate for prime-age workers. However, several

participants assessed that the scope for further improvement in labor force participation was likely limited, especially in view of the sizable contribution that retirements had made to the previous decline in the participation rate.

Participants anticipated that the supply and demand imbalances in the labor market would gradually diminish and the unemployment rate would likely rise somewhat, importantly reflecting the effects of tighter monetary policy. Participants judged that a softening in the labor market would be needed to ease upward pressures on wages and prices. Participants expected that the transition toward a softer labor market would be accompanied by an increase in the unemployment rate. Several commented that they considered it likely that the transition would occur primarily through reduced job vacancies and slower job creation. A couple of participants remarked that, in light of challenges in hiring, businesses might be less willing to reduce their staffing levels in the event of a weakening in general economic activity. A few participants particularly stressed the high uncertainty associated with the expected future path of the unemployment rate and commented that the unemployment rate could rise by considerably more than in the staff forecast.

Participants observed that inflation remained unacceptably high and well above the Committee's longer-run goal of 2 percent. Participants commented that recent inflation data generally had come in above expectations and that, correspondingly, inflation was declining more slowly than they had previously been anticipating. Price pressures had remained elevated and had persisted across a broad array of product categories. Energy prices had declined in recent months but remained considerably higher than in 2021, and upside risks to energy prices remained. Several participants noted the continued elevated rates of increase in core goods prices. These participants considered this development as potentially indicating that the shift of household spending from goods to services might be having a smaller effect on goods prices than they expected or that the supply bottlenecks and labor shortages were taking longer to be resolved. Participants commented that they expected inflation pressures to persist in the near term. Numerous contributing factors were cited as supporting this view, including labor market tightness and the resulting upward pressure on nominal wages, continuing supply chain disruptions, and the persistent nature of increases in services prices, particularly shelter prices.

With respect to the medium term, participants judged that inflation pressures would gradually recede in coming years. Various factors were cited as likely to contribute to this outcome, including the Committee's tightening of its policy stance, a gradual easing of supply and demand imbalances in labor and product markets, and the likelihood that weaker consumer demand would result in a reduction of business profit margins from their current elevated levels. A few participants reported that business contacts in certain retail sectors—such as used cars and apparel—were planning to cut prices in order to help reduce their inventories. Several participants commented that while households across the income distribution were burdened by elevated inflation, those at the lower end of the income distribution were particularly harmed, as a larger share of their income was spent on housing and other necessities.

In assessing inflation expectations, participants noted that longer-term expectations appeared to remain well anchored, as reflected in a broad range of surveys of households, businesses, and forecasters as well as measures obtained from financial markets. Participants remarked that the Committee's affirmation of its strong commitment to its price-stability objective, together with its forceful policy actions, had likely helped keep longerrun inflation expectations anchored. Some stressed that a more prolonged period of elevated inflation would increase the risk of inflation expectations becoming unanchored, making it much more costly to bring inflation down. A few participants discussed the increased dispersion of longer-term inflation expectations across respondents in various surveys, with an increase in the number of respondents reporting relatively low expectations of future inflation acknowledged as a key driver of the increased dispersion but with a couple of participants citing higher inflation expectations among some survey respondents as a cause for concern and a reason not to be complacent about longer-term inflation expectations remaining well anchored.

Participants agreed that the uncertainty associated with their economic outlooks was high and that risks to their inflation outlook were weighted to the upside. Some participants noted rising labor tensions, a new round of global energy price increases, further disruptions in supply chains, and a larger-than-expected pass-through of wage increases into price increases as potential shocks that, if they materialized, could compound an already challenging inflation problem. A number of participants commented that a wage–price spiral had not yet developed but cited its possible emergence as a risk.

Participants broadly judged the risks to real GDP growth to be weighted to the downside, with various global headwinds most prominently cited as contributing factors. These global headwinds included heightened risk of recession in Europe, a slowdown in economic activity occurring in China, and the ongoing global economic implications of Russia's war against Ukraine. Several participants noted that the monetary policy tightening under way in many other economies would affect global financial markets and foreign real GDP growth, with the potential for spillovers to the U.S. economy.

In their consideration of the appropriate stance of monetary policy, participants concurred that the labor market was very tight and that inflation was far above the Committee's 2 percent inflation objective. Participants observed that recent indicators of production and spending had pointed to modest growth, while job gains had been robust and the unemployment rate had remained low. Against this backdrop, all participants agreed that it was appropriate to raise the target range for the federal funds rate 75 basis points at this meeting and to continue the process of reducing the Federal Reserve's securities holdings, as described in the Plans for Reducing the Size of the Federal Reserve's Balance Sheet that the Committee issued in May. Policymakers observed that the rate hike at this meeting was another step toward making the Committee's monetary policy stance sufficiently restrictive to help ease supply and demand imbalances and to bring inflation back to 2 percent. Participants reaffirmed their strong commitment to returning inflation to the Committee's 2 percent objective, with many stressing the importance of staying on this course even as the labor market slowed.

In discussing potential policy actions at upcoming meetings, participants continued to anticipate that ongoing increases in the target range for the federal funds rate would be appropriate to achieve the Committee's objectives. Participants judged that the Committee needed to move to, and then maintain, a more restrictive policy stance in order to meet the Committee's legislative mandate to promote maximum employment and price stability. Many participants noted that, with inflation well above the Committee's 2 percent objective and showing little sign so far of abating, and with supply and demand imbalances in the economy continuing, they had raised their assessment of the path of the federal funds rate that would likely be needed to achieve the Committee's goals. Participants judged that the pace and extent of policy rate increases would continue to depend on the implications of incoming information for the outlook for economic activity and inflation and on risks to the outlook.

Several participants noted that, particularly in the current highly uncertain global economic and financial environment, it would be important to calibrate the pace of further policy tightening with the aim of mitigating the risk of significant adverse effects on the economic outlook. Participants observed that, as the stance of monetary policy tightened further, it would become appropriate at some point to slow the pace of policy rate increases while assessing the effects of cumulative policy adjustments on economic activity and inflation. Many participants indicated that, once the policy rate had reached a sufficiently restrictive level, it likely would be appropriate to maintain that level for some time until there was compelling evidence that inflation was on course to return to the 2 percent objective. Participants noted that, in keeping with the Committee's Plans for Reducing the Size of the Federal Reserve's Balance Sheet, balance sheet runoff had moved up to its maximum planned pace in September and would continue at that pace. They further observed that a significant reduction in the Committee's holdings of securities was in progress and that this process was contributing to the move to a restrictive policy stance. A couple of participants remarked that, after the process of balance sheet reduction was well under way, it would be appropriate for the Committee to consider sales of agency MBS in order to enable suitable progress toward a longer-run SOMA portfolio composed primarily of Treasury securities.

In their assessment of the effects of policy actions and communications to date, participants concurred that the Committee's actions to raise expeditiously the target range for the federal funds rate demonstrated its resolve to lower inflation to 2 percent and to keep inflation expectations anchored at levels consistent with that longerrun goal. Participants noted that the Committee's commitment to restoring price stability, together with its purposeful policy actions and communications, had contributed to a notable tightening of financial conditions over the past year that would likely help reduce inflation pressures by restraining aggregate demand. Participants observed that this tightening had led to substantial increases in real interest rates across the maturity spectrum. Most participants remarked that, although some interest-sensitive categories of spending—such as housing and business fixed investment—had already started to respond to the tightening of financial conditions, a sizable portion of economic activity had yet to display much response. They noted also that inflation had not vet responded appreciably to policy tightening and that a significant reduction in inflation would likely lag that of aggregate demand. Participants observed that a period of real GDP growth below its trend rate, very likely accompanied by some softening in labor market conditions, was required. They agreed that, by moving its policy purposefully toward an appropriately restrictive stance, the Committee would help ensure that elevated inflation did not become entrenched and that inflation expectations did not become unanchored. These policy moves would therefore prevent the far greater economic pain associated with entrenched high inflation, including the even tighter policy and more severe restraint on economic activity that would then be needed to restore price stability.

In light of the broad-based and unacceptably high level of inflation, the intermeeting news of higher-thanexpected inflation, and upside risks to the inflation outlook, participants remarked that purposefully moving to a restrictive policy stance in the near term was consistent with risk-management considerations. Many participants emphasized that the cost of taking too little action to bring down inflation likely outweighed the cost of taking too much action. Several participants underlined the need to maintain a restrictive stance for as long as necessary, with a couple of these participants stressing that historical experience demonstrated the danger of prematurely ending periods of tight monetary policy designed to bring down inflation. Several participants observed that as policy moved into restrictive territory, risks would become more two-sided, reflecting the emergence of the downside risk that the cumulative restraint in aggregate demand would exceed what was required to bring inflation back to 2 percent. A few of these participants noted that this possibility was heightened by factors beyond the Committee's actions, including the tightening of monetary policy stances abroad and the weakening global economic outlook, that were also likely to restrain domestic economic activity in the period ahead.

Committee Policy Action

In their discussion of monetary policy for this meeting, members agreed that recent indicators had pointed to modest growth in spending and production. Members also concurred that job gains had been robust in recent months and the unemployment rate had remained low. Members agreed that inflation remained elevated, reflecting supply and demand imbalances related to the pandemic, higher food and energy prices, and broader price pressures.

Members observed that Russia's war against Ukraine was causing tremendous human and economic hardship.

They also agreed that the war and related events were creating additional upward pressure on inflation and were weighing on global economic activity. Members remarked that they remained highly attentive to inflation risks.

In their assessment of the monetary policy stance necessary for achieving the Committee's maximum-employment and price-stability goals, the Committee decided to raise the target range for the federal funds rate to 3 to 3½ percent and anticipated that ongoing increases in the target range would be appropriate. In addition, members agreed that the Committee would continue reducing its holdings of Treasury securities and agency debt and agency MBS, as described in the Plans for Reducing the Size of the Federal Reserve's Balance Sheet issued in May.

Members agreed that, in assessing the appropriate stance of monetary policy, they would continue to monitor the implications of incoming information for the economic outlook and that they would be prepared to adjust the stance of monetary policy as appropriate if risks emerged that could impede the attainment of the Committee's goals. They also noted that their assessments would take into account a wide range of information, including readings on public health, labor market conditions, inflation pressures and inflation expectations, and financial and international developments. Members affirmed that the Committee was strongly committed to returning inflation to its 2 percent objective.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until instructed otherwise, to execute transactions in the SOMA in accordance with the following domestic policy directive, for release at 2:00 p.m.:

"Effective September 22, 2022, the Federal Open Market Committee directs the Desk to:

- Undertake open market operations as necessary to maintain the federal funds rate in a target range of 3 to 3½ percent.
- Conduct overnight repurchase agreement operations with a minimum bid rate of 3.25 percent and with an aggregate operation limit of \$500 billion; the aggregate operation limit can be temporarily increased at the discretion of the Chair.
- Conduct overnight reverse repurchase agreement operations at an offering rate of 3.05 percent and with a per-counterparty

limit of \$160 billion per day; the per-counterparty limit can be temporarily increased at the discretion of the Chair.

- Roll over at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing in each calendar month that exceeds a cap of \$60 billion per month. Redeem Treasury coupon securities up to this monthly cap and Treasury bills to the extent that coupon principal payments are less than the monthly cap.
- Reinvest into agency mortgage-backed securities (MBS) the amount of principal payments from the Federal Reserve's holdings of agency debt and agency MBS received in each calendar month that exceeds a cap of \$35 billion per month.
- Allow modest deviations from stated amounts for reinvestments, if needed for operational reasons.
- Engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions."

The vote also encompassed approval of the statement below for release at 2:00 p.m.:

"Recent indicators point to modest growth in spending and production. Job gains have been robust in recent months, and the unemployment rate has remained low. Inflation remains elevated, reflecting supply and demand imbalances related to the pandemic, higher food and energy prices, and broader price pressures.

Russia's war against Ukraine is causing tremendous human and economic hardship. The war and related events are creating additional upward pressure on inflation and are weighing on global economic activity. The Committee is highly attentive to inflation risks.

The Committee seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run. In support of these goals, the Committee decided to raise the target range for the federal funds rate to 3 to 3½ percent and anticipates that ongoing increases in the target range will be appropriate. In addition, the Committee will continue reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities, as described in the Plans for Reducing the Size of the Federal Reserve's Balance Sheet that were issued in May. The Committee is strongly committed to returning inflation to its 2 percent objective.

In assessing the appropriate stance of monetary policy, the Committee will continue to monitor the implications of incoming information for the economic outlook. The Committee would be prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals. The Committee's assessments will take into account a wide range of information, including readings on public health, labor market conditions, inflation pressures and inflation expectations, and financial and international developments."

Voting for this action: Jerome H. Powell, John C. Williams, Michael S. Barr, Michelle W. Bowman, Lael Brainard, James Bullard, Susan M. Collins, Lisa D. Cook, Esther L. George, Philip N. Jefferson, Loretta J. Mester, and Christopher J. Waller.

Voting against this action: None.

To support the Committee's decision to raise the target range for the federal funds rate, the Board of Governors of the Federal Reserve System voted unanimously to raise the interest rate paid on reserve balances to 3.15 percent, effective September 22, 2022. The Board of Governors of the Federal Reserve System voted unanimously to approve a ³/₄ percentage point increase in the primary credit rate to 3.25 percent, effective September 22, 2022.⁶

of September 22, 2022, or the date such Reserve Banks inform the Secretary of the Board of such a request. (Secretary's note: Subsequently, the Federal Reserve Banks of New York, Minneapolis, and San Francisco were informed of the Board's approval of their establishment of a primary credit rate of 3.25 percent, effective September 22, 2022.)

⁶ In taking this action, the Board approved requests to establish that rate submitted by the boards of directors of the Federal Reserve Banks of Boston, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Kansas City, and Dallas. This vote also encompassed approval by the Board of Governors of the establishment of a 3.25 percent primary credit rate by the remaining Federal Reserve Banks, effective on the later

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, November 1–2, 2022. The meeting adjourned at 10:20 a.m. on September 21, 2022.

Notation Vote

By notation vote completed on August 16, 2022, the Committee unanimously approved the minutes of the Committee meeting held on July 26–27, 2022.

James A. Clouse Secretary