Minutes of the Federal Open Market Committee
March 15–16, 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, March 15, 2022, at 9:00 a.m. and continued on Wednesday, March 16, 2022, at 9:00 a.m.[1]

Attendance

Jerome H. Powell, Chair
John C. Williams, Vice Chair
Michelle W. Bowman
Lael Brainard
James Bullard
Esther L. George
Loretta J. Mester
Christopher J. Waller

Meredith Black, Charles L. Evans, Patrick Harker, Naureen Hassan, and Neel Kashkari, 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

Kenneth C. Montgomery, Interim President of the Federal Reserve Bank of Boston

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
Michael Held, Deputy General Counsel
Trevor A. Reeve, Economist
Stacey Tevlin, Economist
Beth Anne Wilson, Economist

Shaghil Ahmed, Brian M. Doyle, Carlos Garriga, Joseph W. Gruber, David E. Lebow, and William Wascher, Associate Economists

Lorie K. Logan, Manager, System Open Market Account

Patricia Zobel, Deputy Manager, System Open Market Account

Ann E. Misback, Secretary, Office of the Secretary, Board

Matthew J. Eichner,[2] Director, Division of Reserve Bank Operations and Payment Systems, Board; Michael S. Gibson, Director, Division of Supervision and Regulation, Board; Andreas Lehnert, Director, Division of Financial Stability, Board

Daniel M. Covitz, Deputy Director, Division of Research and Statistics, Board; Sally Davies, Deputy Director, Division of International Finance, Board; Rochelle M. Edge, Deputy Director, Division of Monetary Affairs, Board; Michael T. Kiley, Deputy Director, Division of Financial Stability, Board

Jon Faust and Joshua Gallin, Senior Special Advisers to the Chair, Division of Board Members, Board

Antulio N. Bomfim, Jane E. Ihrig, Kurt F. Lewis, and Nitish R. Sinha, Special Advisers to the Board, Division of Board Members, Board

Linda Robertson, Assistant to the Board, Division of Board Members, Board

David Bowman, David López-Salido, and Min Wei, Senior Associate Directors, Division of Monetary Affairs, Board

Edward Nelson, Senior Adviser, Division of Monetary Affairs, Board; Jeremy B. Rudd, Senior Adviser, Division of Research and Statistics, Board

Stephanie E. Curcuru and Matteo Iacoviello,[3] Associate Directors, Division of International Finance, Board; Burcu Duygan-Bump, Associate Director, Division of Research and Statistics, Board; Jeffrey

[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] Attended through the discussion of plans for reducing the size of the balance sheet.

[3] Attended through the staff review of the economic and financial situation.

D. Walker,[2] Associate Director, Division of Reserve Bank Operations and Payment Systems, Board

Zeynep Senyuz and Rebecca Zarutskie, Deputy Associate Directors, Division of Monetary Affairs, Board

Paul Lengermann and Clara Vega, Assistant Directors, Division of Research and Statistics, Board; Dan Li, Assistant Director, Division of Monetary Affairs, Board

Alyssa G. Anderson,[2] Valerie S. Hinojosa, and Lubomir Petrasek,[2] Section Chiefs, Division of Monetary Affairs, Board; Penelope A. Beattie,[2] Section Chief, Office of the Secretary, Board; Logan T. Lewis,[3] Section Chief, Division of International Finance, Board

David H. Small, Project Manager, Division of Monetary Affairs, Board

Mary Tian[2] and Randall A. Williams, Group Managers, Division of Monetary Affairs, Board

Michele Cavallo and Ander Perez-Orive, Principal Economists, Division of Monetary Affairs, Board

Cynthia L. Doniger and David Glancy,[4] Senior Economists, Division of Monetary Affairs, Board

David Na,[2] Senior Financial Institution and Policy Analyst, Division of Monetary Affairs, Board

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

Kelly J. Dubbert, First Vice President, Federal Reserve Bank of Kansas City

Kartik B. Athreya, Michael Dotsey, and Sylvain Leduc, Executive Vice Presidents, Federal Reserve Banks of Richmond, Philadelphia, and San Francisco, respectively

Edward S. Knotek II, Anna Nordstrom,[2] Giovanni Olivei, and Mark L.J. Wright, Senior Vice Presidents, Federal Reserve Banks of Cleveland, New York, Boston, and Minneapolis, respectively

Kathryn B. Chen, Lisa Chung,[2] Jonas Fisher, Mark J. Jensen, Matthew D. Raskin, Andrea Tambalotti, and Benedict Wensley,[2] Vice Presidents, Federal Reserve Banks of New York, New York, Chicago, Atlanta, New York, New York, and New York, respectively

Seth Searls,[2] Assistant Vice President, Federal Reserve Bank of New York

Karel Mertens, Senior Economic Policy Advisor, Federal Reserve Bank of Dallas

Justin Meyer,[2] Markets Officer, Federal Reserve Bank of New York

Developments in Financial Markets and Open Market Operations

The manager turned first to a review of global financial market developments. Following the Russian invasion of Ukraine and the subsequent imposition of an array of sanctions, the ruble depreciated roughly 40 percent against the dollar. Prices of dollar-denominated Russian bonds plunged 80 to 90 percent, and local trading of Russian equities was suspended after a precipitous decline in Russian stock price indexes. Global financial conditions tightened, reflecting declines in equity prices, increases in sovereign yields and credit spreads, and—for the United States—an appreciation of the dollar.

Prices of commodities that Russia exports, particularly oil and natural gas, soared over the period. While oil prices partially retraced late in the period, options prices suggested considerable probability that oil prices could remain elevated or rise further in the months ahead. Alongside the rise in commodities prices, measures of near-term inflation compensation increased sharply across advanced economies. In Eastern European countries, currencies depreciated notably and equity prices declined, but most emerging market currencies outside of Eastern Europe depreciated only modestly or rose. Sovereign spreads for emerging market economies (EMEs) widened, but the moves outside of Eastern Europe were relatively modest.

The developments in Ukraine sparked some liquidity strains across markets. Overnight interest rates were steady throughout the period, but there were some signs of pressures in term funding markets. High levels of reserves in the banking system and the backstop facilities

[4] Attended Tuesday's session only.

in place—the new repurchase agreement facility for foreign and international monetary authorities (FIMA Repo Facility) and the standing repo facility (SRF), as well as the standing central bank liquidity swap lines and the discount window—likely supported market confidence regarding the availability of liquidity and helped contain funding pressures. Amid a rise in market volatility, trading liquidity declined across a number of sectors. In the Treasury market, market depth fell and the price impact of trades increased modestly in some sectors. Overall, however, volumes were typical, and markets continued to function in an orderly fashion.

Notwithstanding uncertainties associated with geopolitical developments, many central banks continued to signal intentions to move ahead with reducing policy accommodation to address elevated inflation. Market-implied policy rates one year forward rose notably across many advanced foreign economies (AFEs), extending increases seen over recent months.

In the United States, incoming economic data and Federal Reserve communications led investors to expect a more rapid removal of policy accommodation than they had previously expected. Market participants almost universally expected a 25 basis point increase in the target range for the federal funds rate at the current meeting. Moreover, futures prices implied that the federal funds rate would increase around 170 basis points through year-end, about 70 basis points more than had been priced in at the time of the January meeting. Similarly, the median projection of the target range for the federal funds rate in the Open Market Desk's most recent surveys of primary dealers and market participants showed an increase of 150 basis points this year. The median projected path for the target range beyond 2022 rose another 100 basis points by the first half of 2024 to a level modestly above the median projected longer-run level before returning closer to the longer-run level in 2025. Consistent with shifting expectations for the path of policy, shorter-dated Treasury yields rose notably over the intermeeting period and the spread between the 10-year Treasury yield and 2-year Treasury yield narrowed.

Market participants expected an earlier and somewhat faster reduction in System Open Market Account (SOMA) holdings of securities than they did in January. In the Desk surveys, almost 90 percent of respondents projected balance sheet runoff to begin by July. Overall, survey respondents expected a significant reduction in the balance sheet over coming years, although there was a high degree of uncertainty around the magnitude of the total decline.

The manager turned next to a discussion of money markets and policy implementation. Market participants expected the interest on reserve balances rate and overnight reverse repurchase agreement (ON RRP) offering rate to be increased by 25 basis points at the current meeting, in line with their expected increase in the target range, and anticipated that the changes would fully pass through to market overnight interest rates. There was uncertainty around how ON RRP usage might evolve in the near term as money market rates increased. If banks lifted their deposit rates by less than the increase in returns available on alternative investments, depositors could shift funds into these alternatives, leading to downward pressure on rates and increased ON RRP take-up. If instead deposit rates moved up in line with net yields on alternative investments, ON RRP takeup could remain relatively steady. Over the longer term, however, ON RRP balances were expected to decline as the Federal Reserve's balance sheet runoff proceeded and gradually lifted money market rates relative to the ON RRP rate.

Turning to Desk operations, the manager noted that the Desk would be maintaining the size of the SOMA portfolio through reinvestments until the Committee directed otherwise. For Treasury securities, the Desk would follow the usual practice of rolling over all principal payments at auctions. In the absence of regular secondary-market purchases of Treasury securities, the Desk planned to maintain operational readiness by conducting small-value purchases and sales of Treasury securities. For agency mortgage-backed securities (MBS), the Desk planned to continue to reinvest principal payments on a monthly basis through secondary-market purchases. The manager discussed a plan to simplify administrative aspects of the SOMA holdings of agency MBS in coming months through a process of CUSIP (Committee on Uniform Securities Identification Procedures) aggregation. The Desk undertook similar programs of CUSIP aggregation following the conclusion of previous large-scale asset purchase programs; these past CUSIP aggregation programs were successful at reducing the cost and complexity of maintaining agency MBS holdings.

Finally, the manager provided an update on the SRF. The Desk had onboarded four depository institutions as counterparties and noted that a number of additional banks were currently under review. The Desk planned to adjust the counterparty eligibility requirements in

early April to make the SRF accessible to a broader range of banks, in line with the Committee's intention to expand eligibility over time and with efforts to ensure that Desk counterparty policies promote a fair and competitive marketplace.

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

Plans for Reducing the Size of the Balance Sheet

Participants continued their discussion of topics related to plans for reducing the size of the Federal Reserve's balance sheet in a manner consistent with the approach described in the Principles for Reducing the Size of the Federal Reserve's Balance Sheet that the Committee released following its January meeting.

The participants' discussion was preceded by a staff presentation that reviewed the Committee's 2017–19 experience with balance sheet reduction and presented a range of possible options for reducing the Federal Reserve's securities holdings over time in a predictable manner. All of the options featured a more rapid pace of balance sheet runoff than in the 2017–19 episode. The options differed primarily with respect to the size of the monthly caps for securities redemptions in the SOMA portfolio. The presentation addressed the potential implications of each option for the path of the balance sheet during and after runoff. The staff presentation also featured alternative approaches the Committee could consider with respect to SOMA holdings of Treasury bills as well as alternative ways the Committee could eventually slow and then stop balance sheet runoff as the size of the SOMA portfolio approached levels consistent with the Committee's ample-reserves framework for policy implementation.

In their discussion, all participants agreed that elevated inflation and tight labor market conditions warranted commencement of balance sheet runoff at a coming meeting, with a faster pace of decline in securities holdings than over the 2017–19 period. Participants reaffirmed that the Federal Reserve's securities holdings should be reduced over time in a predictable manner primarily by adjusting the amounts reinvested of principal payments received from securities held in the SOMA. Principal payments received from securities held in the SOMA would be reinvested to the extent they exceeded monthly caps. Several participants remarked that they would be comfortable with relatively high monthly caps or no caps. Some other participants noted that monthly caps for Treasury securities should take into consideration potential risks to market functioning. Participants generally agreed that monthly caps of about $60 billion for Treasury securities and about $35 billion for agency MBS would likely be appropriate. Participants also generally agreed that the caps could be phased in over a period of three months or modestly longer if market conditions warrant.

Participants discussed the approach toward implementing caps for Treasury securities and the role that the Federal Reserve's holdings of Treasury bills might play in the Committee's plan to reduce the size of the balance sheet. Most participants judged that it would be appropriate to redeem coupon securities up to the cap amount each month and to redeem Treasury bills in months when Treasury coupon principal payments were below the cap. Under this approach, redemption of Treasury bills would typically bring the total amount of Treasury redemptions up to the monthly cap. Several participants remarked that reducing the Federal Reserve's Treasury bill holdings over time would be appropriate because Treasury bills are highly valued as safe and liquid assets by the private sector, and the Treasury could increase bill issuance to the public as SOMA bill holdings decline. In addition, participants generally noted that maintaining large holdings of Treasury bills is not necessary under the Federal Reserve's ample-reserves operating framework; in the previous scarce-reserves regime, Treasury bill holdings were useful as a tool that could be used to drain reserves from the banking system when necessary to control short-term interest rates. A couple of participants commented that holding some Treasury bills could be appropriate if the Federal Reserve wished to keep its Treasury portfolio neutral with respect to the universe of outstanding Treasury securities.

With respect to the Federal Reserve's agency MBS redemptions, participants generally noted that MBS principal prepayments would likely run under the proposed monthly cap in a range of plausible interest rate scenarios but that the cap could guard against outsized reductions in the Federal Reserve's agency MBS holdings in scenarios with especially high prepayments. Some participants noted that under the proposed approach to running off Treasury and agency securities primarily through adjustments to reinvestments, agency MBS holdings would still make up a sizable share of the Federal Reserve's asset holdings for many years. Participants generally agreed that after balance sheet runoff was well under way, it will be appropriate to consider sales of agency MBS to enable suitable progress toward a longer-run SOMA portfolio composed primarily of

Treasury securities. A Committee decision to implement a program of agency MBS sales would be announced well in advance.

Several participants noted the significant uncertainty around the future level of reserves that would be consistent with the Committee's ample-reserves operating framework. Against this backdrop, participants generally agreed that it would be appropriate to first slow and then stop the decline in the size of the balance sheet when reserve balances were above the level the Committee judged to be consistent with ample reserves, thereby allowing reserves to decline more gradually as nonreserve liabilities increased over time. Participants agreed that lessons learned from the previous balance sheet reduction episode should inform the Committee's current approach to reaching ample reserve levels and that close monitoring of money market conditions and indicators of near-ample reserves should help inform adjustments to the pace of runoff. A couple of participants noted that the establishment of the SRF, which did not exist in the previous runoff episode, could address unexpected money market pressures that might emerge if the Committee adopted an approach to balance sheet reduction in which reserves declined relatively rapidly, but several others noted that the facility was not intended as a substitute for ample reserves. Participants generally agreed that it was important for the Committee to be prepared to adjust any of the details of its approach to reducing the size of the balance sheet in light of economic and financial developments.

No decision regarding the Committee's plan to reduce the Federal Reserve's balance sheet was made at this meeting, but participants agreed they had made substantial progress on the plan and that the Committee was well placed to begin the process of reducing the size of the balance sheet as early as after the conclusion of its upcoming meeting in May.

Staff Review of the Economic Situation

The information available at the time of the March 15–16 meeting suggested that U.S. real gross domestic product (GDP) was increasing in the first quarter at a pace that was slower than the rapid gain posted in the fourth quarter of 2021. Labor market conditions improved further in January and February, and indicators of labor compensation continued to show robust increases. Consumer price inflation through January—as measured by the 12-month percentage change in the price index for personal consumption expenditures (PCE)—remained elevated.

Total nonfarm payroll employment grew strongly in January and February. The unemployment rate edged down, on net, from 3.9 percent in December to 3.8 percent in February. The unemployment rate for African Americans and for Hispanics declined over this period; however, both rates remained noticeably higher than the national average. The labor force participation rate increased in February, as did the employment-to-population ratio. The private-sector job openings rate in January, as measured by the Job Openings and Labor Turnover Survey, was little changed, on net, from its November level and remained well above its pre-pandemic level; the quits rate also remained elevated. Average hourly earnings rose 5.1 percent over the 12 months ending in February, about the same as its year-earlier pace, with widespread increases across industries.

Consumer prices continued to rise rapidly. Total PCE price inflation was 6.1 percent over the 12 months ending in January, and core PCE price inflation, which excludes changes in consumer energy prices and many consumer food prices, was 5.2 percent over the same period. The trimmed mean measure of 12-month PCE inflation constructed by the Federal Reserve Bank of Dallas was 3.5 percent in January, 1.8 percentage points higher than its year-earlier rate of increase. In February, the 12-month change in the consumer price index (CPI) was 7.9 percent, while core CPI inflation was 6.4 percent over the same period. The staff's common inflation expectations index, which combines information from many indicators of inflation expectations and inflation compensation, had largely leveled off over the fall and was close to its 2014 average.

Real PCE appeared to be rising at a faster pace in the first quarter of 2022 than in the fourth quarter of 2021 as social distancing unwound further. Housing demand remained strong, though activity in the residential housing sector continued to be restrained by shortages of construction materials, buildable lots, and other inputs. Available indicators suggested that growth in business fixed investment was picking up in the first quarter as growth in nonresidential structures investment turned positive.

Available data suggested that motor vehicle production declined sharply in February as ongoing shortages of semiconductors and other supply chain problems continued to restrain output. Outside of the motor vehicle sector, manufacturing production appeared to have moved up over January and February; however, this increase did not appear to reflect a substantial reduction in supply bottlenecks, as many indicators of the state of

bottlenecks showed little sign of improvement over this period. In particular, materials inputs such as electronic components and aluminum remained in short supply, while broad measures of industrial input prices remained elevated. Separately, transportation and distribution activity continued to be held back by port congestion and a shortage of truck drivers.

Available indicators suggested that real government purchases were little changed in the first quarter after declining in the fourth quarter of 2021. Although real state and local purchases appeared to be rising, federal defense purchases appeared to be contracting further in the first quarter.

The U.S. international trade deficit widened at the end of last year to a record high and surpassed that high at the beginning of this year. Imports of goods grew rapidly again in January, led by increases in consumer goods, while exports of goods fell back slightly from elevated fourth-quarter levels. Shipping congestion and other bottlenecks continued to restrain the level of trade in goods. Services exports and imports fell back in January relative to December, reflecting a reduction in travel to and from the United States. Because international travel remained depressed, services trade was still very low relative to pre-pandemic norms.

Incoming data suggested that the rapid spread of the Omicron variant had tempered the foreign recovery around the turn of the year. Purchasing managers indexes were consistent with the Omicron wave having a notable effect on services activity but a rather muted effect on manufacturing activity and supplier delivery times. Moreover, with COVID-19 cases having fallen in many regions, authorities had already eased restrictions and social mobility had recovered, except in China, where lockdowns were recently reimposed. The Russian invasion of Ukraine, however, constituted another negative shock to the global economy by pushing up commodity prices further, hurting global risk sentiment, and exacerbating supply bottlenecks. Inflation abroad continued to rise, driven by recovering global demand, rising retail energy and food prices, and ongoing strains on global supply chains; the effects of the Russian invasion contributed to some of these inflationary pressures.

Staff Review of the Financial Situation

Financial markets were highly volatile over the intermeeting period, with strained liquidity in some markets. The Russian invasion of Ukraine led to periods of particularly elevated volatility and deteriorating investor risk sentiment. Nominal Treasury yields and the expected path of policy rose during the intermeeting period, driven by economic data releases and FOMC communications that were viewed as implying a more rapid removal of monetary policy accommodation than previously expected. Domestic equity indexes declined modestly, while those in Europe fell noticeably. Financing conditions remained accommodative, although borrowing costs increased further.

Investors interpreted incoming economic data and Federal Reserve communications as implying a more rapid removal of monetary policy accommodation than they had previously expected. On net, the expected path of the federal funds rate implied by financial market quotes—unadjusted for term premiums—rose significantly, along with the yields on nominal Treasury securities, since the previous FOMC meeting. Near-term inflation compensation implied by Treasury Inflation-Protected Securities rose sharply, reflecting the higher-than-anticipated CPI releases and surging energy prices following the Russian invasion of Ukraine.

Spreads of investment- and speculative-grade corporate bonds widened noticeably since the previous FOMC meeting and ended the period close to the medians of their historical distributions. Spreads of municipal bonds also widened significantly across credit categories. Broad equity indexes declined modestly, on net, amid significant fluctuations. Equity prices increased early in the period because of stronger-than-anticipated corporate earnings and economic data releases, but they retraced these gains as investor risk sentiment deteriorated following the Ukraine invasion. The one-month option-implied volatility on the S&P 500—the VIX—surged briefly immediately following the invasion but ended the intermeeting period slightly lower on net.

Foreign asset prices were highly volatile over the intermeeting period in response to geopolitical developments, central bank communications, and rising inflation concerns. News related to Russia's invasion of Ukraine, in particular, contributed to decreases in major foreign equity indexes, especially in Europe, and a moderate increase in the broad dollar index. Despite downward pressure from the geopolitical events, AFE sovereign yields increased notably, on net, on higher-than-expected inflation readings and central bank communications that were perceived as less accommodative than expected. EME sovereign spreads widened, and EME-dedicated funds experienced moderate portfolio outflows, which increased after the Russian invasion. Even so, financial conditions among EMEs—including fund flows and the relative strength of local currencies outside of Europe—were resilient compared with past episodes

of global turbulence, reflecting in part higher commodity prices and monetary policy tightening by EME central banks.

Liquidity conditions became strained in some financial markets during the intermeeting period. Market depth—a gauge of the ability to transact in large volumes at quotes posted by market makers—deteriorated in U.S. Treasury, U.S. equity, and crude oil markets. Trading volumes generally remained within normal ranges in most markets and increased above normal levels in Treasury markets later in the period. Bid–ask spreads did not increase notably in most markets. However, investors reported that strained liquidity at times amplified the volatility of price moves and may have contributed to the particularly large swings in Treasury yields and equity prices late in the intermeeting period.

Short-term funding markets were mostly stable over the intermeeting period, although spreads in some segments widened. The effective federal funds rate and the Secured Overnight Financing Rate generally held steady at 8 basis points and 5 basis points, respectively. Overnight rates on commercial paper (CP) across most sectors also held steady, although rates and spreads on longer-tenor CP and negotiable certificates of deposit increased amid the escalation of the Ukraine invasion. Spreads between three-month forward rate agreements and overnight index swaps widened as borrowers increased precautionary issuance of longer-tenor debt while money market investors preferred shorter-duration investments. ON RRP take-up was little changed, averaging about $1.6 trillion.

In domestic credit markets, credit remained broadly available for most types of borrowers during the intermeeting period. Nonfinancial gross corporate bond issuance slowed noticeably in January and February, reflecting lower demand for credit due to rising borrowing costs and elevated issuance over the past two years. However, issuance rebounded to healthy levels in March for investment-grade firms, with a few high-yield firms also raising funds. Leveraged loan issuance was strong in January and February. Small business loan originations in December roughly matched pre-pandemic levels. The share of small firms that actively sought financing in the past few months and reported that it was more difficult to acquire credit compared with three months earlier remained very low.

For households, both nonmortgage and mortgage credit remained accommodative. Credit card balances increased significantly in the fourth quarter, and auto credit outstanding grew at a moderate pace in December. The number of mortgage rate locks for home purchases through February was elevated relative to pre-pandemic levels. Mortgage credit for households with low credit scores continued to ease through February but remained tighter than before the pandemic.

The credit quality of large nonfinancial corporations and municipalities remained strong over the intermeeting period. The volumes of credit rating upgrades for corporate and municipal bonds outpaced those of downgrades moderately in January and February. Default rates on corporate bonds, municipal bonds, and leveraged loans remained very low; most market indicators of future expected default rates for corporate bonds and leveraged loans also remained low.

Credit quality in the commercial real estate sector continued to show some signs of stress. Delinquency rates for commercial mortgage-backed securities (CMBS) collateralized by hotel and retail properties continued to decline in January but remained well above pre-pandemic levels, while those for CMBS in the office sector increased somewhat in January but remained fairly low by historical standards.

For households, credit quality remained fairly healthy. Delinquency rates for mortgages, which include loans in forbearance and other loans behind on payments, continued to trend down through December, while those for prime auto loan and prime credit card borrowers remained flat in December. For nonprime borrowers, delinquency rates rose in December, although they remained subdued by historical standards.

Information on borrowing costs through February and early March suggested that the events surrounding Russia's invasion of Ukraine did not have a significant effect on financing conditions during the intermeeting period. Borrowing costs continued to increase in many sectors but remained low relative to their historical distributions. Spreads in the corporate bond, municipal bond, and CMBS markets generally rose to somewhat above their pre-pandemic levels, reflecting heightened geopolitical risks, uncertainty about the outlook for monetary policy, and elevated financial market volatility. Residential mortgage rates increased, mostly as a result of widening MBS spreads, which market participants attributed mainly to the tapering of the Federal Reserve's agency MBS purchases and uncertainty surrounding the market supply of agency MBS that would accompany balance sheet runoff by the Federal Reserve. Interest rates on

new credit cards rose to roughly their pre-pandemic levels, while rates on auto loans also rose slightly but remained significantly below pre-pandemic levels.

Staff Economic Outlook

The near-term projection for U.S. economic activity prepared by the staff for the March FOMC meeting was weaker than in January, reflecting the anticipated economic effects of the conflict in Ukraine and financial conditions that were expected to be less supportive than previously assumed. For 2022 as a whole, real GDP growth was projected to step down markedly from its rapid 2021 pace before picking up slightly in 2023 as the continued resolution of supply constraints provided a small boost to growth. Real GDP growth was expected to slow further in 2024 to a pace that was in line with potential growth. However, the level of real GDP was expected to remain well above potential over the projection period, and labor market conditions were expected to remain very tight.

The staff's near-term projection for PCE price inflation was revised up considerably relative to January. The upward revision reflected the staff's reaction to the persistently high and broad-based levels of domestic inflation, import price inflation, and wage growth that had been observed, as well as the staff's expectation that the upward pressure on inflation from supply and demand imbalances would last longer than previously assumed. In addition, total PCE price inflation was further revised up to reflect higher expected paths for consumer energy and food prices. All told, total PCE price inflation was projected to be 4 percent in 2022. PCE price inflation was then expected to slow to 2.3 percent in 2023 and to 2.1 percent in 2024 as food, energy, and import price inflation moved lower and as supply and demand imbalances were resolved.

The staff continued to judge that the risks to the baseline projection for real activity were skewed to the downside and that the risks to the inflation projection were skewed to the upside. The COVID-19 pandemic remained a source of downside risk to activity, while the possibility of more severe and more persistent supply issues was viewed as posing an additional downside risk to activity and an upside risk to inflation. The Russian invasion of Ukraine was perceived as adding to the uncertainty around the outlook for economic activity and inflation, as the conflict carried the risk of further exacerbating supply chain disruptions and of putting additional upward pressure on inflation by boosting the prices for energy, food, and other key commodities. Finally, the possibility that continued high inflation would cause longer-term inflation expectations to become unanchored was seen as another upside risk to the inflation projection.

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 2024 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 indicators of economic activity and employment had continued to strengthen. Job gains had been strong in recent months, and the unemployment rate had declined substantially. Inflation remained elevated, reflecting continued supply and demand imbalances, higher energy prices, and broader price pressures. With appropriate firming in the stance of monetary policy, participants expected inflation to return to the Committee's 2 percent objective over time and the labor market to remain strong. Participants recognized that the invasion of Ukraine by Russia was causing tremendous human and economic hardship for the Ukrainian people. They judged that the implications of the war for the U.S. economy were highly uncertain, but in the near term, the invasion and related events were likely to create significant additional upward pressure on inflation and could weigh on economic activity.

With regard to the economic outlook, participants noted that real GDP growth had slowed from its rapid pace in the fourth quarter of 2021, largely reflecting weaker inventory investment, but consumption and business investment continued to rise solidly. The Omicron variant left only a mild and brief imprint on economic data, as households and firms appeared resilient to this wave of the virus. Relative to their December forecasts, participants had revised down their projections for real GDP growth this year, reflecting factors such as a slowdown in inventory investment from its strong pace late last year, reduced fiscal and monetary policy accommodation, and the Russian invasion of Ukraine, which had led to higher prices of energy and other commodities, increased uncertainty, and weighed on broader financial

conditions and consumer sentiment. Even so, participants judged that economic fundamentals remained solid and that they expected above-trend growth to continue, sustaining a strong labor market.

Participants commented that demand for labor continued to substantially exceed available supply across many parts of the economy and that their business contacts continued to report difficulties in hiring and retaining workers. Participants observed that various indicators pointed to a very tight labor market. Employment growth remained strong through the Omicron wave. A couple of participants highlighted that the annual benchmark revision to the establishment survey employment data revealed stronger employment growth in the second half of 2021 than was initially reported. The unemployment rate had fallen to a post-pandemic low, and quits and job openings were at all-time highs. Although payroll employment remained below its pre-pandemic level, the shortfall was concentrated in a few sectors and reflected a shortage of workers rather than insufficient demand for labor. Consistent with a tight labor market, nominal wages were rising at the fastest pace in many years. While wage gains thus far had been the strongest among the lowest quartile of earners and among production and supervisory workers, wage pressures had begun to spread across the income and skill distributions. Many participants commented that they expected the labor market to remain strong and wage pressures to remain elevated. A few participants noted that there were signs that the pandemic-related factors that had held back labor supply might be abating and pointed to the notable increase in the labor force participation rate among prime-age men in February.

Participants remarked that recent inflation readings continued to significantly exceed the Committee's longer-run goal and noted that developments associated with Russia's invasion of Ukraine, including the related surge in energy prices, will add to near-term inflation pressures. Some participants noted that elevated inflation had continued to broaden from goods into services, especially rents, and into sectors that had not yet experienced large price increases, such as education, apparel, and health care. A few participants also noted that the number of spending categories experiencing inflation rates above 4 percent had continued to rise, or that the trimmed mean inflation measure from the Federal Reserve Bank of Dallas had risen to its highest level since the early 1980s. Many participants indicated that their business contacts continued to report substantial increases in wages and input prices that were being passed through into higher prices to their customers without any significant decrease in demand. Participants commented on a few factors that might lead the high inflation readings to persist, including strong aggregate demand, significant increases in energy and commodity prices, and supply chain disruptions that were likely to require a lengthy period to resolve. In addition, some participants noted that recent higher inflation could affect future inflation dynamics. For example, a few participants commented that persistently high inflation readings might lead businesses, when setting prices, to be more attentive to aggregate inflation or more willing to raise prices. In addition, a couple of other participants noted that some household survey data suggested that near-term consumer inflation expectations have become more sensitive to actual inflation readings since the beginning of the pandemic. A few participants commented that both survey- and market-based measures of short-term inflation expectations were at historically high levels. Several other participants noted that longer-term measures of inflation expectations from households, professional forecasters, and market participants still appeared to remain well anchored, which—together with appropriate monetary policy and an eventual easing of supply constraints—would support a return of inflation over time to levels consistent with the Committee's longer-run goal.

Participants agreed that developments surrounding the Russian invasion of Ukraine, including the resulting sanctions, were adding to inflation pressures and posing upside risks to the inflation outlook. Participants noted that Russia and Ukraine were major suppliers of various commodities used in the production of energy, food, and some industrial inputs. A continued cutoff of that supply from the world market would further push up prices for those commodities and, over time, lead to price increases in downstream industries. The invasion had also exacerbated the disruptions of supply chains. Participants commented that, by leading to higher energy and food prices, weighing on consumer sentiment, and contributing to tighter financial conditions, the invasion also negatively affected the growth outlook. A few participants highlighted additional downside risks to growth associated with the war, such as the risk that a more protracted conflict than the public currently expects could lead to much tighter global financial conditions or other disruptions. A couple of participants commented that the increased uncertainty might lead businesses and consumers to reduce spending, though their business contacts currently were not seeing signs of such shifts or expecting a significant pullback in demand.

Several participants judged that the upside risk to inflation associated with the war appeared more significant than the downside risk to growth, as inflation was already high, the United States had a relatively low level of financial and trade exposure to Russia, and the U.S. economy was well positioned to absorb additional adverse demand shocks.

In their discussion of risks to the outlook, participants agreed that uncertainty regarding the path of inflation was elevated and that risks to inflation were weighted to the upside. Participants cited several such risks, including ongoing supply bottlenecks and rising energy and commodity prices, both of which were exacerbated by the Russian invasion; recent COVID-related lockdowns in China that had the potential to further disrupt supply chains; and the possibility that longer-run inflation expectations might become unanchored. Uncertainty about real activity was also seen as elevated. Various participants noted downside risks to the outlook, including risks associated with the Russian invasion, a broad tightening in global financial conditions, and a prolonged rise in energy prices.

In their consideration of the appropriate stance of monetary policy, all participants concurred that the U.S. economy was very strong, with an extremely tight labor market, and that inflation was high and well above the Committee's 2 percent inflation objective. Against this backdrop, all participants agreed that it was appropriate to begin a process of removing policy accommodation by raising the target range for the federal funds rate at this meeting. They further judged that ongoing increases in the target range for the federal funds rate would be warranted to achieve the Committee's objectives. Participants also agreed that reducing the size of the Federal Reserve's balance sheet would play an important role in firming the stance of monetary policy and that they expected it would be appropriate to begin this process at a coming meeting, possibly as soon as in May. Participants judged that the firming of monetary policy, alongside an eventual waning of supply–demand imbalances, would help to keep longer-term inflation expectations anchored and bring inflation down over time to levels consistent with the Committee's 2 percent longer-run goal while sustaining a strong labor market.

Many participants noted that—with inflation well above the Committee's objective, inflationary risks to the upside, and the federal funds rate well below participants' estimates of its longer-run level—they would have preferred a 50 basis point increase in the target range for the federal funds rate at this meeting. A number of these participants indicated, however, that, in light of greater near-term uncertainty associated with Russia's invasion of Ukraine, they judged that a 25 basis point increase would be appropriate at this meeting. Many participants noted that one or more 50 basis point increases in the target range could be appropriate at future meetings, particularly if inflation pressures remained elevated or intensified. A number of participants noted that the Committee's previous communications had already contributed to a tightening of financial conditions, as evident in the notable increase in longer-term interest rates over recent months.

All participants indicated their strong commitment and determination to take the measures necessary to restore price stability. In that context, participants judged that the Committee's approach of commencing increases in the target range for the federal funds rate, and indicating that ongoing increases were likely, was fully warranted. Participants judged that it would be appropriate to move the stance of monetary policy toward a neutral posture expeditiously. They also noted that, depending on economic and financial developments, a move to a tighter policy stance could be warranted. A few participants judged that, at the current juncture, a significant risk facing the Committee was that elevated inflation and inflation expectations could become entrenched if the public began to question the Committee's resolve to adjust the stance of policy as appropriate to achieve the Committee's 2 percent longer-run objective for inflation. These participants suggested that expediting the removal of policy accommodation would reduce this risk while also leaving the Committee well positioned to adjust the stance of policy if geopolitical and other developments led to a more rapid dissipation of demand pressures than expected.

Participants agreed that the economic outlook was highly uncertain and that policy decisions must take account of the state of financial markets and the economy. As always, the Committee would need to be prepared to adjust the stance of monetary policy in response to the evolving economic outlook and the risks to the outlook. In this regard, participants noted that developments associated with Russia's invasion of Ukraine posed heightened risks for both the United States and the global economy. Against this backdrop, all participants judged that risk management would be important in deciding upon the appropriate stance of monetary policy, and that policy also would need to be nimble in responding to incoming data and the evolving outlook. In particular, all participants underscored the need to remain attentive

to the risks of further upward pressure on inflation and longer-run inflation expectations.

Committee Policy Action

In their discussion of monetary policy for this meeting, members agreed that indicators of economic activity and employment had continued to strengthen. Job gains had been strong in recent months, and the unemployment rate had declined substantially. Members also agreed that inflation remained elevated, reflecting continued supply and demand imbalances, higher energy prices, and broader price pressures.

Members agreed that geopolitical developments warranted several changes to the postmeeting statement. They concurred that the invasion of Ukraine by Russia was causing tremendous human and economic hardship, and they agreed to update the statement to recognize this tragic situation. Members agreed that the implications of the war for the U.S. economy were highly uncertain, but they judged that, in the near term, the invasion and related events were likely to create additional upward pressure on inflation and weigh on economic activity.

In their assessment of the monetary policy stance necessary for achieving the Committee's maximum-employment and price-stability goals, members agreed that with appropriate firming in the stance of monetary policy, they expected inflation to return to the Committee's 2 percent objective and the labor market to remain strong. In support of these goals, the Committee decided to raise the target range for the federal funds rate to ¼ to ½ percent and anticipated that ongoing increases in the target range would be appropriate. One member preferred to raise the target range for the federal funds rate by 0.5 percentage point to ½ to ¾ percent at this meeting in light of elevated inflation pressures. With regard to reducing the size of the Federal Reserve's balance sheet, all members agreed that they had made substantial progress on arriving at a plan specifying the steps the Committee would take. They expected that, depending on economic and financial conditions, beginning the process of reducing the size of the balance sheet would be appropriate at a coming meeting, possibly as early as at the Committee's May meeting.

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 in the event that risks emerged that could impede the attainment of the Committee's goals. They also concurred that, in assessing the appropriate stance of monetary policy, they 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.

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 March 17, 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 ¼ to ½ percent.
> - Conduct overnight repurchase agreement operations with a minimum bid rate of 0.5 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 0.3 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 all principal payments from the Federal Reserve's holdings of Treasury securities and reinvest all principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities (MBS) in agency MBS.
> - 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.:

> "Indicators of economic activity and employment have continued to strengthen. Job gains have been strong in recent months, and the unemployment rate has declined substantially. Inflation remains elevated, reflecting supply and

demand imbalances related to the pandemic, higher energy prices, and broader price pressures.

The invasion of Ukraine by Russia is causing tremendous human and economic hardship. The implications for the U.S. economy are highly uncertain, but in the near term the invasion and related events are likely to create additional upward pressure on inflation and weigh on economic activity.

The Committee seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run. With appropriate firming in the stance of monetary policy, the Committee expects inflation to return to its 2 percent objective and the labor market to remain strong. In support of these goals, the Committee decided to raise the target range for the federal funds rate to ¼ to ½ percent and anticipates that ongoing increases in the target range will be appropriate. In addition, the Committee expects to begin reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities at a coming meeting.

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, Michelle W. Bowman, Lael Brainard, Esther L. George, Patrick Harker, Loretta J. Mester, and Christopher J. Waller.

Voting against this action: James Bullard.

Patrick Harker voted as an alternate member at this meeting.

President Bullard preferred at this meeting to raise the target range for the federal funds rate by 0.5 percentage point to ½ to ¾ percent in light of elevated inflation pressures.

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 0.40 percent, effective March 17, 2022. The Board of Governors of the Federal Reserve System voted unanimously to approve a ¼ percentage point increase in the primary credit rate to 0.50 percent, effective March 17, 2022.[5]

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, May 2–3, 2022. The meeting adjourned at 10:30 a.m. on March 16, 2022.

Notation Votes

By notation vote completed on February 15, 2022, the Committee unanimously approved the minutes of the Committee meeting held on January 25–26, 2022.

By notation vote completed on February 17, 2022**,** the Committee unanimously approved the Investment Trading Policy for FOMC Officials and related revisions to the Program for Security of FOMC information. In conjunction with the notation vote, all non-voting participants also expressed support for the Policy and related revisions to the Program.

James A. Clouse
Secretary

[5] In taking this action, the Board approved requests to establish the rate submitted by the boards of directors of the Federal Reserve Banks of Boston, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, and San Francisco. This vote also encompassed approval by the Board of Governors of the establishment of a 0.50 percent primary credit rate by the remaining Federal Reserve Banks, effective on the later of March 17, 2022, and 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 and Dallas were informed of the Secretary of the Board's approval of their establishment of a primary credit rate of 0.50 percent, effective March 17, 2022.) The second vote of the Board also encompassed approval of the establishment of the interest rates for secondary and seasonal credit under the existing formulas for computing such rates.