Minutes of the Federal Open Market Committee May 2–3, 2023

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, May 2, 2023, at 10:00 a.m. and continued on Wednesday, May 3, 2023, at 9:00 a.m.¹

Attendance

Jerome H. Powell, Chair John C. Williams, Vice Chair Michael S. Barr Michelle W. Bowman

Michelle W. Bowman

Lisa D. Cook

Austan D. Goolsbee

Patrick Harker

Philip N. Jefferson

Neel Kashkari

Lorie K. Logan

Christopher J. Waller

Thomas I. Barkin, Raphael W. Bostic, Mary C. Daly, Loretta J. Mester, and Sushmita Shukla, Alternate Members of the Committee

James Bullard and Susan M. Collins, Presidents of the Federal Reserve Banks of St. Louis and Boston, respectively

Kelly J. Dubbert, Interim President of the Federal Reserve Bank of Kansas City

Joshua Gallin, Secretary
Matthew M. Luecke, Deputy Secretary
Brian J. Bonis, Assistant Secretary
Michelle A. Smith, Assistant Secretary
Mark E. Van Der Weide, General Counsel
Richard Ostrander, Deputy General Counsel
Trevor A. Reeve, Economist
Stacey Tevlin, Economist
Beth Anne Wilson, Economist

Shaghil Ahmed, James A. Clouse, Anna Paulson, Andrea Raffo, Chiara Scotti, and William Wascher, Associate Economists

Roberto Perli, Manager, System Open Market Account

- Stephanie R. Aaronson,² Senior Associate Director, Division of Research and Statistics, Board
- Jose Acosta, Senior Communications Analyst, Division of Information Technology, Board
- Andre Anderson, First Vice President, Federal Reserve Bank of Atlanta
- Kartik B. Athreya, Executive Vice President, Federal Reserve Bank of Richmond
- Penelope A. Beattie,² Section Chief, Office of the Secretary, Board
- Daniel O. Beltran, Deputy Associate Director, Division of International Finance, Board
- Carol C. Bertaut, Senior Adviser, Division of International Finance, Board
- Mark A. Carlson,² Adviser, Division of Monetary Affairs, Board
- Michele Cavallo, Principal Economist, Division of Monetary Affairs, Board
- Juan C. Climent, Special Adviser to the Board, Division of Board Members, Board
- Stephanie E. Curcuru, Deputy Director, Division of International Finance, Board
- Ahmet Degerli, Economist, Division of Monetary Affairs, Board
- John C. Driscoll,² Principal Economist, Division of Research and Statistics, Board
- Wendy E. Dunn,² Adviser, Division of Research and Statistics, Board
- Burcu Duygan-Bump, Associate Director, Division of Research and Statistics, Board
- Rochelle M. Edge, Deputy Director, Division of Monetary Affairs, Board

Julie Ann Remache, Deputy Manager, System Open Market Account

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 Tuesday's session only.

- Matthew J. Eichner,³ Director, Division of Reserve Bank Operations and Payment Systems, Board
- Eric C. Engstrom, Associate Director, Division of Monetary Affairs, Board
- Jon Faust, Senior Special Adviser to the Chair, Division of Board Members, Board
- Giovanni Favara, Assistant Director, Division of Monetary Affairs, Board
- Glenn Follette, Associate Director, Division of Research and Statistics, Board
- Jennifer Gallagher, Assistant to the Board, Division of Board Members, Board
- Peter M. Garavuso, Senior Information Manager, Division of Monetary Affairs, Board
- Carlos Garriga, Senior Vice President, Federal Reserve Bank of St. Louis
- Michael S. Gibson, Director, Division of Supervision and Regulation, Board
- Christine Graham,² Special Adviser to the Board, Division of Board Members, Board
- Joseph W. Gruber, Executive Vice President, Federal Reserve Bank of Kansas City
- Valerie S. Hinojosa, Section Chief, Division of Monetary Affairs, Board
- Jane E. Ihrig, Special Adviser to the Board, Division of Board Members, Board
- Ghada M. Ijam, System Chief Information Officer, Federal Reserve Bank of Richmond
- Michael T. Kiley, Deputy Director, Division of Financial Stability, Board
- Kyungmin Kim, Senior Economist, Division of Monetary Affairs, Board
- David E. Lebow, Senior Associate Director, Division of Research and Statistics, Board
- Sylvain Leduc, Director of Research, Federal Reserve Bank of San Francisco

- Andreas Lehnert, Director, Division of Financial Stability, Board
- Kurt F. Lewis, Special Adviser to the Board, Division of Board Members, Board
- Laura Lipscomb, Special Adviser to the Board, Division of Board Members, Board
- David López-Salido, Senior Associate Director, Division of Monetary Affairs, Board
- Kurt Lunsford, Senior Research Economist, Federal Reserve Bank of Cleveland
- Patrick E. McCabe, Deputy Associate Director, Division of Research and Statistics, Board
- Davide Melcangi, Research Economist, Federal Reserve Bank of New York
- Ann E. Misback, Secretary, Office of the Secretary, Board
- David Na, Lead Financial Institution and Policy Analyst, Division of Monetary Affairs, Board
- Makoto Nakajima, Vice President, Federal Reserve Bank of Philadelphia
- Michelle M. Neal, Head of Markets, Federal Reserve Bank of New York
- Giovanni Olivei, Senior Vice President, Federal Reserve Bank of Boston
- Michael G. Palumbo, Senior Associate Director, Division of Research and Statistics, Board
- Marcel A. Priebsch, Principal Economist, Division of Monetary Affairs, Board
- Nitish Ranjan Sinha, Special Adviser to the Board, Division of Board Members, Board
- John J. Stevens, Senior Associate Director, Division of Research and Statistics, Board
- Paula Tkac, Senior Vice President, Federal Reserve Bank of Atlanta
- Clara Vega, Special Adviser to the Board, Division of Board Members, Board

³ Attended through the discussion of developments in financial markets and open market operations.

Annette Vissing-Jørgensen, Senior Adviser, Division of Monetary Affairs, Board

Jeffrey D. Walker,³ Associate Director, Division of Reserve Bank Operations and Payment Systems, Board

Min Wei,² Senior Associate Director, Division of Monetary Affairs, Board

Paul R. Wood, Special Adviser to the Board, Division of Board Members, Board

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

Developments in Financial Markets and Open Market Operations

The manager turned first to a review of developments in financial markets. Asset prices were less volatile and financial market conditions eased somewhat over the intermeeting period as investor sentiment around the banking system stabilized. On net, nominal Treasury yields declined, equities appreciated, credit spreads tightened, and the trade-weighted value of the dollar de-Measures of implied volatility declined across markets. Policy-sensitive rates, however, fluctuated a fair amount over the period, particularly in response to economic data but also because of market perceptions of risk and liquidity conditions. Treasury market liquidity improved somewhat over the period but remained challenged. Treasury cash and futures markets continued to function in an orderly manner despite the lower-than-normal liquidity.

Regarding developments late in the intermeeting period, the closure and acquisition of First Republic Bank were seen as orderly, though investors remained focused on stresses in the banking sector. In addition, the U.S. Treasury Department announced it may not be able to fully satisfy the federal government's obligations as early as June 1 if the debt limit is not raised or suspended, but that the actual date this event would occur might come a number of weeks later. Yields on Treasury bills and coupon securities maturing in the first half of June increased notably amid significant volatility.

Deposit outflows from small and mid-sized banks largely stopped in late March and April. Although equity prices for regional banks fell further over the period, for the vast majority of banks these declines appeared primarily to reflect expectations for lower profitability rather than solvency concerns. Market participants remained alert to the possibility of another intensification of banking stress.

Responses to the Open Market Desk's Survey of Primary Dealers and Survey of Market Participants suggest that investors' macroeconomic outlooks were little changed from March despite ongoing focus on the implications of the expected tightening of credit. Respondents saw upside inflation risks, albeit less than in March.

Market participants broadly expected a 25 basis point rate increase at the May meeting and saw the resulting rate as the likely peak for the current tightening cycle. Survey respondents assigned a much higher probability to the peak federal funds rate being between 5 and 5.25 percent than they did in March. However, respondents still assigned a substantial probability that the peak rate may turn out to be above 5.25 percent. Respondents expected the peak rate to be maintained through the January 2024 FOMC meeting.

Regarding the balance sheet and money markets, balance sheet runoff continued to proceed smoothly and overnight secured and unsecured rates continued to trade well within the target range for the federal funds rate. Respondents to the Desk's surveys generally expected that overnight reverse repurchase agreement (ON RRP) balances will remain elevated in the near term before declining later this year. The ON RRP facility continued to support effective policy implementation and control over the federal funds rate, providing a strong floor for money market rates. Balances at the ON RRP facility remained within their recent range, indicating that use of the facility was not an important factor driving outflows of deposits from the banking system. Use of the ON RRP facility declined at times over the intermeeting period in response to increases in rates on overnight secured money market instruments and on short-term Federal Home Loan Bank debt.

The Committee voted unanimously to renew the reciprocal currency arrangements with the Bank of Canada and the Bank of Mexico; these arrangements are associated with the Federal Reserve's participation in the North American Framework Agreement of 1994. In addition, the Committee voted unanimously to renew the dollar and foreign currency liquidity swap arrangements with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank. The votes to renew the Federal Reserve's participation in these standing arrangements occur annually at the April or May FOMC meeting.

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 May 2-3 meeting indicated that real gross domestic product (GDP) had expanded at a modest pace in the first quarter. Labor market conditions remained tight in March, as job gains were robust and the unemployment rate was low. Consumer price inflation—as measured by the 12-month percent change in the price index for personal consumption expenditures (PCE)—continued to be elevated in March. Limited data were available on economic activity during the period after the onset of banking-sector stress in mid-March, although several recent surveys—such as the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) in April, the National Federation of Independent Business's survey in March, and the Federal Reserve Bank of New York's Survey of Consumer Expectations in March—indicated that bank credit conditions were tightening further.

The pace of increases in total nonfarm payroll employment slowed in March but was still robust, and the unemployment rate ticked down to 3.5 percent. The unemployment rate for African Americans fell to 5.0 percent, and the jobless rate for Hispanics dropped to 4.6 percent. The aggregate measures of both the labor force participation rate and the employment-to-population ratio edged up. The private-sector job openings rate—as measured by the Job Openings and Labor Turnover Survey—moved down markedly during February and March but remained high.

Recent measures of nominal wage growth continued to ease from their peaks recorded last year but were still elevated. Over the 12 months ending in March, average hourly earnings for all employees rose 4.2 percent, well below its peak of 5.9 percent a year earlier. Over the year ending in March, the employment cost index (ECI) for private-sector workers increased 4.8 percent, down from its peak of 5.5 percent over the year ending in June of last year.

Consumer price inflation remained elevated in March but continued to slow. Total PCE price inflation was 4.2 percent over the 12 months ending in March, and core PCE price inflation—which excludes changes in consumer energy prices and many consumer food prices—was 4.6 percent; the total inflation measure was down markedly from its level in January, while the core measure was only slightly lower. The trimmed mean

measure of 12-month PCE price inflation constructed by the Federal Reserve Bank of Dallas was 4.7 percent in March. The latest survey-based measures of longer-term inflation expectations from the University of Michigan Surveys of Consumers in April and the Federal Reserve Bank of New York's Survey of Consumer Expectations in March remained within the range of their values reported in recent months; near-term measures of inflation expectations from these surveys moved up but were still below their peaks seen last year.

Real GDP growth was modest in the first quarter, led by an increase in PCE. Gains in consumer spending picked up for the quarter as a whole, driven by a surge in January that was followed by a small net decline over February and March. Light motor vehicle sales, however, picked up notably in April. Growth in business fixed investment slowed further in the first quarter, and new orders for nondefense capital goods excluding aircraft continued to decline in March, pointing to weakness in capital goods shipments in the near term. Residential investment declined further in the first quarter but at a slower pace than last year. Net exports made a small positive contribution to GDP growth in the first quarter, as exports rebounded more strongly than imports from their fourth-quarter declines. U.S. manufacturing output fell in March, and near-term indicators such as national and regional indexes for new orders pointed to more softening in factory output in the coming months.

Foreign economic activity rebounded in the first quarter, reflecting the reopening of China's economy from its COVID-19-related shutdowns, a pickup in the economies of Canada and Mexico, and the resilience of Europe's economy to the energy price shock from Russia's war on Ukraine; a mild winter also helped reduce energy demand in Europe. In contrast, economic growth elsewhere in emerging Asia was weak in the first quarter mainly due to a pronounced tech-cycle slowdown.

Oil prices edged down amid concerns about the global economic outlook. A slowing of retail energy inflation continued to contribute to an easing of headline consumer price inflation in many advanced foreign economies (AFEs). Core inflation showed signs of easing in some foreign economies but remained persistently elevated amid tight labor markets. Accordingly, many foreign central banks continued their monetary policy tightening. That said, some central banks paused their policy rate increases or altered their forward guidance amid uncertainty about the global economic outlook

and the recent banking-sector stress. Some also signaled a shift toward a more data-dependent approach in future decisions.

Staff Review of the Financial Situation

Market sentiment improved over the intermeeting period, with concerns about a sharp near-term deceleration in economic activity appearing to recede as stress in the banking sector declined. The market-implied path for the federal funds rate in 2023 increased modestly over the period. Broad equity price indexes increased, although equity prices of some regional banks were lower, and equity market volatility declined. Financing conditions continued to be restrictive, and borrowing costs remained elevated.

Over the intermeeting period, the market-implied path for the federal funds rate in 2023 rose modestly, partially unwinding the sharp decline observed in early March due to the banking-sector stress. For 2024 and 2025, the implied policy path based on overnight index swaps fluctuated amid mixed economic data releases, and declined slightly on net. Yields on nominal Treasury securities with maturities greater than one year moved lower, and inflation compensation at mediumand long-term horizons edged down slightly. Measures of uncertainty about the path of interest rates declined modestly but remained substantially elevated by historical standards.

Broad stock price indexes increased moderately, and the VIX—the one-month option-implied volatility on the S&P 500—decreased notably over the intermeeting period. However, market participants remained attentive to developments at regional banks. Equity prices at such banks broadly declined over the intermeeting period in part because of higher funding costs, as well as concerns about profitability and a possible deterioration in the performance of commercial real estate (CRE) loans.

Risk sentiment in foreign financial markets also improved, on net, over the intermeeting period amid reduced investor concerns about the banking sector, leading to moderate increases in broad equity indexes and declines in option-implied measures of equity volatility. That said, equity prices for euro-area banks declined somewhat, on net, and remained significantly lower than their levels before the onset of banking stresses in early March. Market expectations of policy rates and sovereign yields were little changed in most AFEs but rose notably in the U.K., in part because of higher-than-expected wage and inflation data. The dollar continued its earlier depreciation as differentials between U.S. and

AFE sovereign yields narrowed and global risk sentiment improved. Outflows from funds dedicated to emerging markets slowed to near zero over the intermeeting period, while sovereign credit spreads for emerging market economies were little changed on net.

U.S. markets for commercial paper (CP) and negotiable certificates of deposit (NCDs) stabilized over the intermeeting period. Spreads for lower-rated nonfinancial CP, which spiked following Silicon Valley Bank's closure, narrowed significantly. Outstanding levels of CP and NCDs increased modestly over the intermeeting period, while the share of short-maturity unsecured issuance of CP and NCDs fell to normal levels, reflecting a net easing of stress associated with regional banks.

Conditions in overnight bank funding and repurchase agreement markets remained stable over the intermeeting period, and the increase of 25 basis points in the Federal Reserve's administered rates following the March FOMC meeting fully passed through to overnight money market rates. The effective federal funds rate printed at 4.83 percent every day during the period, while the Secured Overnight Financing Rate averaged 4.81 percent—slightly above the offering rate at the ON RRP facility. Daily take-up in the ON RRP facility remained elevated, reflecting continued significant usage by money market mutual funds, ongoing uncertainty around the policy path, and limited supply of alternative investments such as Treasury bills.

In domestic credit markets, borrowing costs for businesses and households eased modestly in some markets but remained at elevated levels. Over the intermeeting period, yields on corporate bonds declined moderately, and yields on agency residential mortgage-backed securities and 30-year conforming residential mortgage rates moved a little lower. However, interest rates on short-term small business loans continued to rise through March and reached their highest levels since the Global Financial Crisis.

Credit flows for businesses and households slowed moderately, as high borrowing costs and market volatility amid stress in the banking sector appeared to weigh on financing volumes in some markets. While issuance of nonfinancial corporate bonds and leveraged loans slowed notably in mid-March amid stress in the banking sector, issuance normalized over the intermeeting period as that stress abated later in the month and broader market sentiment rebounded. In April, speculative-grade nonfinancial bond issuance was solid, while investment-grade nonfinancial bond issuance was sub-

dued, in part due to seasonal factors. Growth in commercial and industrial (C&I) loans on banks' books was weak in the first quarter of 2023 relative to its pace in 2022.

In the April SLOOS, banks reported further tightening of standards for most loan categories over the past three months, following widespread tightening in previous quarters. Banks of all sizes expected their lending standards to tighten further for the rest of 2023. The most cited reason for tightening C&I standards and terms was a less favorable or more uncertain economic outlook. Mid-sized banks-those that have total consolidated assets in the range of \$50 billion to \$250 billion—tightened C&I standards more than other banks and additionally reported that a deterioration in their current or expected liquidity position was an important reason for their tightening. Such banks account for a bit over one-fourth of C&I lending. Banks of all sizes expected to tighten C&I standards further over the remainder of the year, with small and mid-sized banks more widely reporting this expectation.

Although CRE loan growth on banks' balance sheets remained robust in the first quarter, the April SLOOS indicated that loan standards across all CRE loan categories tightened further in the first quarter. The reported tightening in standards over the first quarter was particularly widespread for mid-sized banks. Banks also reported that they expected to tighten CRE standards further over the remainder of the year, with mid-sized banks very broadly reporting this expectation. Meanwhile, commercial mortgage-backed securities (CMBS) issuance was very slow in February and March, amid higher spreads and volatility as well as tighter lending standards.

Credit remained broadly available in the residential mortgage market for high-credit-score borrowers who met standard conforming loan criteria, but credit availability for households with lower credit scores remained tight. In the April SLOOS, the net percentages of banks reporting tighter standards for all consumer loan categories during the first quarter were elevated relative to their historical range, and respondents expected that standards would continue to tighten over the remainder of 2023. Even so, consumer loans grew at a robust pace in the first quarter, with a continued strong expansion in revolving credit balances.

Overall, the credit quality of most businesses and households remained solid but deteriorated somewhat for businesses with lower credit ratings and for households with lower credit scores. The credit quality of C&I and CRE loans on banks' balance sheets remained sound as of the end of the fourth quarter of last year. However, in the April SLOOS, banks frequently cited concerns about a deterioration in the quality of their loan portfolios as a reason for expecting to tighten standards over the remainder of the year.

The staff provided an update on its assessment of the stability of the financial system. The staff judged that the banking system was sound and resilient despite concerns about profitability at some banks. The staff judged that asset valuation pressures remained moderate. In particular, the staff noted that the equity risk premium and corporate bond spreads declined over the past few months but remained near historical medians. Valuations in both residential and commercial property markets remained elevated. Rising borrowing costs had contributed to a moderation of price pressures in housing markets, and year-over-year house price increases had decelerated. The staff noted that the CRE sector remained vulnerable to large price declines. This possibility seemed particularly salient for office and downtown retail properties given the shift toward telework in many industries. The staff also noted analysis that found that while losses to CRE debt holders could be moderate in aggregate, some banks and the CMBS market could experience stress should prices of these properties decline significantly.

The staff assessed that vulnerabilities associated with household leverage remained at moderate levels. For nonfinancial businesses, debt relative to nominal GDP declined some but continued to be near a historically high level. The ability of nonfinancial firms to service their debt kept pace with rising debt loads and interest rates.

In terms of financial-sector leverage, going into the period of recent bank stress, banks of all sizes appeared strong, with substantial loss-absorbing capacity as measured by regulatory capital ratios well above levels that prevailed before the Great Recession. However, the ratio of tangible common equity to total tangible assets at banks—excluding global systemically important banks—had fallen sharply in recent quarters, partly because of a substantial drop in the value of securities held in their portfolios. The majority of the banking system had been able to effectively manage this interest rate risk exposure. However, the failure of three banks resulting from poor interest rate risk and liquidity risk management had put stress on some additional banks. For the nonbank sector, leverage at large hedge funds remained somewhat elevated in the third quarter of 2022, and more recent data from the Senior Credit Officer Opinion Survey on Dealer Financing Terms suggested this fact had not changed.

With regard to vulnerabilities associated with funding risks, the staff assessed that although funding strains had been notable for some banks, such strains remained low for the banking system as a whole, especially in light of official interventions by the Federal Reserve, the Federal Deposit Insurance Corporation, and the U.S. Department of Treasury to support bank depositors. Outflows of funds from bank deposits in mid-March, which were concentrated at a limited number of banks, had slowed.

Staff Economic Outlook

The economic forecast prepared by the staff for the May FOMC meeting continued to assume that the effects of the expected further tightening in bank credit conditions, amid already tight financial conditions, would lead to a mild recession starting later this year, followed by a moderately paced recovery. Real GDP was projected to decelerate over the next two quarters before declining modestly in both the fourth quarter of this year and the first quarter of next year. Real GDP growth over 2024 and 2025 was projected to be below the staff's estimate of potential output growth. The unemployment rate was forecast to increase this year, to peak next year, and then to start declining gradually in 2025. Resource utilization in both product and labor markets was forecast to loosen, with the level of real output moving below the staff's estimate of potential output in early 2024 and the unemployment rate rising above the staff's estimate of its natural rate at that time.

The staff's core inflation forecast was revised up a little relative to the previous projection. Recent data for core PCE goods prices and the ECI measure of wage growth—the latter of which importantly influences the staff's projection of core nonhousing services inflation—came in above expectations, and the staff judged that supply-demand imbalances in both goods markets and labor markets were easing a bit more slowly than anticipated. On a four-quarter change basis, total PCE price inflation was projected to be 3.1 percent this year, with core inflation at 3.8 percent. Core goods inflation was projected to move down further this year and then remain subdued, housing services inflation was expected to have about peaked in the first quarter and to move down over the rest of the year, and core nonhousing services inflation was forecast to slow gradually as nominal wage growth eased further. Reflecting the projected effects of less tightness in resource utilization, core inflation was forecast to slow through next year but remain moderately above 2 percent. With expected declines in consumer energy prices and a substantial moderation in food price inflation, total inflation was projected to run below core inflation this year and next. In 2025, both total and core PCE price inflation were expected to be at about 2 percent.

The staff continued to judge that uncertainty around the baseline projection was considerable and still viewed risks as being determined importantly by the implications for macroeconomic conditions of developments in the banking sector. If banking-sector stress were to abate more quickly or have less of an effect on macroeconomic conditions than assumed in the baseline, then the risks would be tilted to the upside for economic activity and inflation, a scenario that the staff viewed as only a little less likely than the baseline. If banking and financial conditions and their effects on macroeconomic conditions were to deteriorate more than assumed in the baseline, then the risks around the baseline would be skewed to the downside for economic activity and inflation. On balance, the staff saw the risks around the baseline inflation forecast as tilted to the upside, as an upside economic scenario with higher inflation appeared more likely than a downside scenario with lower inflation, and because inflation could continue to be more persistent than expected and inflation expectations could become unanchored after a long period of elevated inflation.

Participants' Views on Current Conditions and the Economic Outlook

In their discussion of current economic conditions, participants noted that economic activity had expanded at a modest pace in the first quarter. Nonetheless, job gains had been robust in recent months, and the unemployment rate had remained low. Inflation remained elevated. Participants agreed that the U.S. banking system was sound and resilient. They commented that tighter credit conditions for households and businesses were likely to weigh on economic activity, hiring, and inflation. However, participants agreed that the extent of these effects remained uncertain. Against this background, participants concurred that they remained highly attentive to inflation risks.

In assessing the economic outlook, participants noted that the growth rate of real GDP in the first quarter of this year was modest despite a pickup in consumer spending, as inventory investment—a volatile category—declined substantially. Participants generally expected real GDP to grow at a pace below its longer-run

trend rate in 2023, reflecting the effects of restrictive financial conditions. Participants assessed that the cumulative tightening of monetary policy over the past year had contributed significantly to more restrictive financial conditions. They also judged that banking-sector stress would likely weigh further on economic activity, but the extent to which that would be the case remained highly uncertain. With inflation well above the Committee's longer-run 2 percent objective, and core inflation showing only some signs of moderation, participants expected that a period of below-trend growth in real GDP and some softening in labor market conditions would be needed to bring aggregate supply and aggregate demand into better balance and reduce inflationary pressures over time.

Participants generally noted that the actions taken by the Federal Reserve and other government agencies in response to developments in the banking sector had been effective in largely reducing stress. They noted that conditions in the banking sector had broadly improved since early March, with the initial deposit outflows experienced by some regional and smaller banks moderating substantially over subsequent weeks. Many participants commented that the recent developments in the banking sector had contributed to some tightening of lending standards beyond that which had occurred during previous quarters, especially among small and mid-sized banks. Some participants noted that small businesses tend to rely on small and mid-sized banks as primary sources of credit and therefore may disproportionally bear the effects of tighter lending conditions. Some participants mentioned that access to credit had not yet appeared to have declined significantly since the recent onset of stress in the banking sector. Participants judged that stress in the banking sector would, in coming quarters, likely induce banks to tighten lending standards by more than they would have in response to higher interest rates alone. However, participants generally noted that it was too early to assess with confidence the magnitude and persistence of these effects on economic activity.

In their discussion of the household sector, participants noted that consumer spending showed strength in the first quarter, supported by gains in personal disposable income. They also remarked that the quarterly strength was driven mainly by very strong spending growth in January, while real spending fell modestly over February and March. Consistent with that slowing, participants anticipated that consumer spending would likely grow at a subdued rate over the remainder of 2023, reflecting in large part the effects of the tightening in financial

conditions over the past year. Participants remarked that higher interest rates would continue to restrain interest-sensitive expenditures by households, such as those on housing and durable goods. Participants also noted that the rise in uncertainty associated with recent developments in the banking sector could weigh on consumer sentiment and spending. However, several participants observed that high-frequency measures of consumer sentiment had not yet shown significant changes following the banking-sector developments. A few participants remarked that there had been some ongoing reduction in consumers' discretionary expenditures in the face of elevated inflation and higher borrowing rates, especially among lower- and middle-income households; some of those declines were reportedly driven by shifts in purchases toward lower-cost options.

Regarding the business sector, participants observed that growth in business fixed investment was subdued in the first quarter, reflecting relatively high borrowing costs, weak growth of business-sector output, and businesses' increasing concerns about the general economic outlook. Participants expected the tightening of bank lending standards to weigh further on firms' capital expenditures. Several participants noted that, based on reports from their District contacts, concerns related to banking-sector stress could add more uncertainty to an already soft economic outlook, increasing firms' caution, especially at smaller and mid-sized firms that rely heavily on bank credit to finance their operations. However, some other participants mentioned that developments in the banking sector appeared to have had only a modest effect so far on credit availability for firms.

Participants noted that the labor market remained very tight, with robust payroll gains in March and an unemployment rate near historically low levels. Nevertheless, they noted some signs that the imbalance of supply and demand in the labor market was easing, with prime-age labor force participation returning to its pre-pandemic level and further reductions in the rates of job openings and quits. In addition, some participants noted that their District contacts reported less difficulty in hiring, lower turnover rates, and some layoffs. Participants anticipated that employment growth would likely slow further, reflecting a moderation in aggregate demand coming partly from tighter credit conditions. Participants remarked that although nominal wage growth appeared to be slowing gradually, it was still running at a pace that, given current estimates of trend productivity growth, was well above what would be consistent over the longer run with the Committee's 2 percent inflation objective. Participants generally anticipated that under appropriate monetary policy, imbalances in the labor market would gradually diminish, easing pressures on wages and prices.

Participants agreed that inflation was unacceptably high. They commented that data through March indicated that declines in inflation, particularly for measures of core inflation, had been slower than they had expected. Participants observed that although core goods inflation had moderated since the middle of last year, it had decelerated less rapidly than expected in recent months, despite reports from several business contacts of supply chain constraints continuing to ease. Additionally, participants emphasized that core nonhousing services inflation had shown few signs of slowing in the past few months. Some participants remarked that a further easing in labor market conditions would be needed to help bring down inflation in this component. Regarding housing services inflation, participants observed that soft readings on rents for leases signed by new tenants were starting to feed into measured inflation. They expected that this process would continue and would help lead to a decline in housing services inflation over this year. In discussing the likely effects on inflation of recent banking-sector developments, several participants remarked that tighter credit conditions may not put much downward pressure on inflation in part because lower credit availability could restrain aggregate supply as well as aggregate demand. Several participants noted that longer-term measures of inflation expectations from surveys of households and businesses remained well anchored. Participants emphasized that with appropriate firming of monetary policy, well-anchored longer-term inflation expectations would support a return of inflation to the Committee's 2 percent longer-run goal.

Participants noted that risks associated with the recent banking stress had led them to raise their already high assessment of uncertainty around their economic outlooks. Participants judged that risks to the outlook for economic activity were weighted to the downside, although a few noted the risks were two sided. In discussing sources of downside risk to economic activity, participants referenced the possibility that the cumulative tightening of monetary policy could affect economic activity more than expected, and that further strains in the banking sector could prove more substantial than anticipated. Some participants also noted concerns that the statutory limit on federal debt might not

be raised in a timely manner, threatening significant disruptions to the financial system and tighter financial conditions that weaken the economy. Regarding risks to inflation, participants cited the possibility that price pressures could prove more persistent than anticipated because of, for example, stronger-than-expected consumer spending and a tight labor market, especially if the effect of bank stress on economic activity proved modest. However, a few participants cited the possibility that further tightening of credit conditions could slow household spending and reduce business investment and hiring, all of which would support the ongoing rebalancing of supply and demand in product and labor markets and reduce inflation pressures.

In their discussion of financial stability, various participants commented on recent developments in the banking sector. These participants noted that the banking system was sound and resilient, that actions taken by the Federal Reserve in coordination with other government agencies had served to calm conditions in that sector, but that stresses remained. A number of participants noted that the banking sector was well capitalized overall, and that the most significant issues in the banking system appeared to be limited to a small number of banks with poor risk-management practices or substantial exposure to specific vulnerabilities. These vulnerabilities included significant unrealized losses on assets resulting from rising interest rates, heavy reliance on uninsured deposits, or strained profitability amid higher funding costs. Some participants additionally noted that, because of weak fundamentals for CRE such as high vacancy rates in the office segment, high exposure to such assets was a vulnerability for some banks. Participants also commented on the susceptibility of some nonbank financial institutions to runs or instability. These included money market funds, which had recently experienced large cash inflows; hedge funds, which tend to use substantial leverage and may hold concentrated positions in some assets with low or zero margin; thinly capitalized nonbank mortgage servicers; and digital asset entities. Many participants mentioned that it is essential that the debt limit be raised in a timely manner to avoid the risk of severely adverse dislocations in the financial system and the broader economy. A few participants noted the importance of orderly functioning of the market for U.S. Treasury securities or stressed the importance of the appropriate authorities continuing to address issues related to the resilience of the market. A number of participants emphasized that the Federal Reserve should maintain readiness to use its liquidity tools, as well as its microprudential and macroprudential regulatory and supervisory tools, to mitigate future financial stability risks.

In their consideration of appropriate monetary policy actions at this meeting, participants concurred that inflation remained substantially elevated relative to the Committee's longer-run goal of 2 percent. Economic activity had expanded at a modest pace in the first quarter. The labor market continued to be tight, with robust job gains in recent months, and the unemployment rate remained low. Participants also noted that recent developments in the banking sector would likely result in tighter credit conditions for households and businesses, which would weigh on economic activity, hiring, and inflation. However, the extent of these effects remained uncertain. Against this backdrop, all participants agreed that it was appropriate to raise the target range for the federal funds rate 25 basis points to 5 percent to 51/4 percent. All participants agreed that it was also appropriate to continue the process of reducing the Federal Reserve's securities holdings, as described in its previously announced Plans for Reducing the Size of the Federal Reserve's Balance Sheet.

In discussing the policy outlook, participants generally agreed that in light of the lagged effects of cumulative tightening in monetary policy and the potential effects on the economy of a further tightening in credit conditions, the extent to which additional increases in the target range may be appropriate after this meeting had become less certain. Participants agreed that it would be important to closely monitor incoming information and assess the implications for monetary policy. In determining the extent to which additional policy firming may be appropriate to return inflation to 2 percent over time, various participants noted specific factors that should bear on future decisions on policy actions. One such factor was the degree and timing with which cumulative policy tightening restrained economic activity and reduced inflation, with some participants commenting that they saw evidence that the past years' tightening was beginning to have its intended effect. Another factor was the degree to which tighter credit conditions for households and businesses resulting from events in the banking sector would weigh on activity and reduce inflation, which participants agreed was very uncertain. Additional factors included the progress toward returning inflation to the Committee's longer-run goal of 2 percent, and the pace at which labor market conditions softened and economic growth slowed.

Participants also discussed several risk-management considerations that could bear on future policy decisions. A few assessed that there were upside risks to economic growth. However, almost all participants commented that downside risks to growth and upside risks to unemployment had increased because of the possibility that banking-sector developments could lead to further tightening of credit conditions and weigh on economic activity. Almost all participants stated that, with inflation still well above the Committee's longerrun goal and the labor market remaining tight, upside risks to the inflation outlook remained a key factor shaping the policy outlook. A few participants noted that they also saw some downside risks to inflation.

Taking into account these various considerations, participants discussed their views on the extent to which further policy firming after the current meeting may be appropriate. Participants generally expressed uncertainty about how much more policy tightening may be appropriate. Many participants focused on the need to retain optionality after this meeting. Some participants commented that, based on their expectations that progress in returning inflation to 2 percent could continue to be unacceptably slow, additional policy firming would likely be warranted at future meetings. Several participants noted that if the economy evolved along the lines of their current outlooks, then further policy firming after this meeting may not be necessary. In light of the prominent risks to the Committee's objectives with respect to both maximum employment and price stability, participants generally noted the importance of closely monitoring incoming information and its implications for the economic outlook.

Participants discussed the importance and various aspects of clearly explaining monetary policy actions and strategy. All participants reaffirmed their strong commitment to returning inflation to the Committee's 2 percent objective over time and remained highly attentive to inflation risks. A few participants commented that recent monetary policy actions and communications had helped keep inflation expectations well anchored, which they saw as important for the attainment of the Committee's goals. Participants emphasized the importance of communicating to the public the data-dependent approach of policymakers, and the vast majority of participants commented that the adjusted language in the postmeeting statement was helpful in that respect. Some participants stressed that it was crucial to communicate that the language in the postmeeting statement should not be interpreted as signaling either that decreases in the target range are likely this year or that further increases in the target range had been ruled out.

Committee Policy Actions

In their discussion of monetary policy for this meeting, members agreed that economic activity had expanded at a modest pace in the first quarter. They also concurred that job gains had been robust in recent months, and the unemployment rate had remained low. Inflation had remained elevated.

Members concurred that the U.S. banking system was sound and resilient. They also agreed that tighter credit conditions for households and businesses were likely to weigh on economic activity, hiring, and inflation, but that the extent of these effects was uncertain. Members also concurred that they remained highly attentive to inflation risks.

Members agreed that 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 members agreed to raise the target range for the federal funds rate to 5 to 51/4 percent. Members agreed to closely monitor incoming information and assess the implications for monetary policy. In determining the extent to which additional policy firming may be appropriate to return inflation to 2 percent over time, members concurred that they will take into account the cumulative tightening of monetary policy, the lags with which monetary policy affects economic activity and inflation, and economic and financial developments. In addition, members agreed that they will continue reducing the Federal Reserve's holdings of Treasury securities and agency debt and agency mortgage-backed securities, as described in its previously announced plans. All members affirmed that they are strongly committed to returning inflation to their 2 percent objective.

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. They 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. Members also agreed that their assessments will take into account a wide range of information, including readings on labor market conditions, inflation pressures and inflation expectations, and financial and international developments.

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

"Effective May 4, 2023, 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 5 to 5¹/₄ percent.
- Conduct standing overnight repurchase agreement operations with a minimum bid rate of 5.25 percent and with an aggregate operation limit of \$500 billion.
- Conduct standing overnight reverse repurchase agreement operations at an offering rate of 5.05 percent and with a per-counterparty limit of \$160 billion per day.
- 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.:

"Economic activity expanded at a modest pace in the first quarter. Job gains have been robust in recent months, and the unemployment rate has remained low. Inflation remains elevated.

The U.S. banking system is sound and resilient. Tighter credit conditions for households and businesses are likely to weigh on economic activity, hiring, and inflation. The extent of these effects remains uncertain. The Committee remains 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 5 to 51/4 percent. The Committee will closely monitor incoming information and assess the implications for monetary policy. In determining the extent to which additional policy firming may be appropriate to return inflation to 2 percent over time, the Committee will take into account the cumulative tightening of monetary policy, the lags with which monetary policy affects economic activity and inflation, and economic and financial developments. In addition, the Committee will continue reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities, as described in its previously announced plans. 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 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, Lisa D. Cook, Austan D. Goolsbee, Patrick Harker, Philip N. Jefferson, Neel Kashkari, Lorie K. Logan, 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 5.15 percent, effective May 4, 2023. The Board of Governors of the Federal Reserve System voted unanimously to approve a ½ percentage point increase in the primary credit rate to 5.25 percent, effective May 4, 2023.4

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, June 13–14, 2023. The meeting adjourned at 10:00 a.m. on May 3, 2023.

Notation Vote

By notation vote completed on April 11, 2023, the Committee unanimously approved the minutes of the Committee meeting held on March 21–22, 2023.

Joshua Gallin Secretary

Reserve Bank, effective on the later of May 4, 2023, or the date such Reserve Bank informs the Secretary of the Board of such a request. (Secretary's note: Subsequently, the Federal Reserve Bank of New York was informed of the Board's approval of their establishment of a primary credit rate of 5.25 percent, effective May 4, 2023.)

⁴ 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, Minneapolis, Kansas City, Dallas, and San Francisco. The vote also encompassed approval by the Board of Governors of the establishment of a 5.25 percent primary credit rate by the remaining Federal