Minutes of the Federal Open Market Committee
November 2–3, 2021

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, November 2, 2021, at 1:00 p.m. and continued on Wednesday, November 3, 2021, at 9:00 a.m.[1]

Attendance

Jerome H. Powell, Chair
John C. Williams, Vice Chair
Thomas I. Barkin
Raphael W. Bostic
Michelle W. Bowman
Lael Brainard
Richard H. Clarida
Mary C. Daly
Charles L. Evans
Randal K. Quarles
Christopher J. Waller

James Bullard, Esther L. George, Naureen Hassan, Loretta J. Mester, and Kenneth C. Montgomery, Alternate Members of the Committee

Patrick Harker and Neel Kashkari, Presidents of the Federal Reserve Banks of Philadelphia, and Minneapolis, respectively

Meredith Black, Interim President of the Federal Reserve Bank of Dallas

James A. Clouse, Secretary
Matthew M. Luecke, Deputy 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, Rochelle M. Edge, Anna Paulson, 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

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

William F. Bassett, Antulio N. Bomfim, Burcu Duygan-Bump, Jane E. Ihrig, Kurt F. Lewis, Chiara Scotti, 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 López-Salido, Senior Associate Director, Division of Monetary Affairs, Board

Edward Nelson and Annette Vissing-Jørgensen, Senior Advisers, Division of Monetary Affairs, Board; Jeremy B. Rudd, Senior Adviser, Division of Research and Statistics, Board

Glenn Follette, Associate Director, Division of Research and Statistics, Board; Christopher J. Gust, Associate Director, Division of Monetary Affairs,

[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 developments in financial markets and open market operations.

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

Skander Van den Heuvel, Deputy Associate Director, Division of Financial Stability, Board

Gianni Amisano, Byron Lutz, and Raven Molloy, Assistant Directors, Division of Research and Statistics, Board; Brian J. Bonis, Giovanni Favara, and Dan Li, Assistant Directors, Division of Monetary Affairs, Board

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

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

Randall A. Williams, Group Manager, Division of Monetary Affairs, Board

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

Callum Jones and Arsenios Skaperdas, Senior Economists, Division of Monetary Affairs, Board

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

Isaiah C. Ahn, Senior Staff Assistant, Division of Monetary Affairs, Board

Ron Feldman, First Vice President, Federal Reserve Bank of Minneapolis

Joseph W. Gruber and Geoffrey Tootell, Executive Vice Presidents, Federal Reserve Banks of Kansas City and Boston, respectively

Anne Baum, Carlos Garriga, Paolo A. Pesenti, and Mark L.J. Wright, Senior Vice Presidents, Federal Reserve Banks of New York, St. Louis, New York, and Minneapolis, respectively

Satyajit Chatterjee and Alexander L. Wolman, Vice Presidents, Federal Reserve Banks of Philadelphia and Richmond, respectively

Edward S. Prescott, Senior Economic and Policy Advisor, Federal Reserve Bank of Cleveland

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

Mark Spiegel, Senior Policy Advisor, Federal Reserve Bank of San Francisco

Brent Meyer, Policy Advisor and Economist, Federal Reserve Bank of Atlanta

Discussion of Financial Markets and Open Market Operations

The manager turned first to a discussion of global financial markets. Sovereign yields rose sharply across many advanced economies with much of the increase concentrated in measures of inflation compensation. In the United States, the five-year measure of inflation compensation based on Treasury Inflation Protected Securities (TIPS) rose by around 45 basis points. Far forward measures of inflation compensation also rose, but by modest amounts. In the Open Market Desk's surveys of primary dealers and market participants, the median forecast for headline PCE inflation in 2021 was revised up notably. Median forecasts beyond 2021move up by less, although the average of the probabilities reported by survey respondents placed on higher inflation outcomes at these horizons increased modestly.

Policy sensitive rates increased across most advanced economies. The central banks of Norway and New Zealand raised their policy rates early in the period, and policy communications from the Bank of England and the Bank of Canada pointed to the potential for earlier policy firming than had been expected, contributing to the upward movement of global rates. The Reserve Bank of Australia ended its yield target for the April 2024 government bond. That central bank signaled that conditions for raising the policy rate could be met in 2023 but were unlikely to be achieved in the earlier timeframe implied by market pricing. Some European Central Bank communications also suggested that market rates were likely not consistent with the outlook for policy.

In the United States, the market-implied path of the federal funds rate rose, implying an earlier date for raising the target range for the federal funds rate and a faster pace of rate hikes than was the case in September. Option-implied volatility on short-dated interest rates increased, reportedly reflecting greater uncertainty over

[3] Attended Tuesday's session only.

the path of the federal funds rate. Desk survey responses also indicated expectations for an earlier increase in the target range, although the median respondent's modal expectation shifted by less than market pricing. The median survey respondent's modal expectation for the federal funds rate at the end of 2025 was little changed suggesting that investors had not revised their expectations for the cumulative extent of policy firming over the next four years. Expectations for a reduction in the pace of net asset purchases coalesced further, and most survey respondents expected the tapering of asset purchases to start with the November purchase schedule with monthly reductions of $10 billion and $5 billion in Treasury securities and agency mortgage-backed securities (MBS), respectively.

Over the intermeeting period, U.S. equity indexes rose and the one-month option-implied volatility on the S&P 500—the VIX—fell to post-pandemic lows. Continued strong earnings underpinned the rise in equity prices, with firms posting profits near historical highs. Despite signs of robust risk appetite, market participants continued to note prominent risks to the outlook, including ongoing challenges in the Chinese property sector.

Turning to Desk operations, the manager noted that, should the Committee decide to announce a reduction in the pace of net asset purchases at this meeting, the Desk would issue a monthly purchase schedule on November 12 reflecting this change. The mid-December purchase schedule, to be released just before the next FOMC meeting, would reflect additional reductions of the same size. Treasury securities and agency MBS would continue to be purchased across sectors and coupons consistent with current practice.

If similar reductions in the net purchase pace were implemented in subsequent months, the System Open Market Account (SOMA) portfolio would peak around next June at about $8.5 trillion. In terms of composition, Treasury securities and agency MBS would constitute roughly 70 percent and 30 percent of the SOMA portfolio, respectively—roughly in line with the shares of Treasury securities and agency MBS in the total stock of these securities outstanding—and the SOMA portfolio would be more heavily weighted toward Treasury securities than after the conclusion of the third large-scale asset purchase program (LSAP 3) following the global financial crisis. The maturity composition of SOMA Treasury coupon holdings would also be fairly close to that of the outstanding universe of Treasury securities, and the weighted average maturity would be shorter than after LSAP 3.

Turning to money market developments, the manager noted that the transition away from LIBOR (London Interbank Offered Rate) had gained momentum with a pick-up in the interdealer trading volume of Secured Overnight Financing Rate (SOFR) derivatives; that said, much remained to be done to complete the LIBOR transition. Market participants were attentive to some temporary downward pressure on the SOFR over the period. This softness appeared to be the result of technical factors and was observed primarily in centrally cleared repurchase agreement markets. The Federal Reserve's administered rates—the interest on reserve balances rate and the overnight reverse repurchase agreement (ON RRP) rate—continued to support effective interest rate control and, outside of month- and quarter-end, the federal funds rate remained stable over the period.

Regarding the debt ceiling, the short-term resolution reached in October increased the debt limit by $480 billion. Market participants' estimates of the new date when the Treasury would exhaust its extraordinary measures and cash balance were wide-ranging but some estimates suggested the date might be as early as mid-December. Most market participants anticipated that a resolution to the debt ceiling would again be reached without a delayed payment on maturing Treasury securities although uncertainty about the debt ceiling resolution remained a source of concern in financial markets.

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 November 2–3 meeting suggested that U.S. real GDP growth had slowed markedly in the third quarter after the first half's rapid pace. Labor market conditions continued to improve in September, though employment growth was slower than in recent months. Consumer price inflation in September—as measured by the 12-month percentage change in the PCE price index—was elevated.

Growth in total nonfarm payroll employment slowed further in September, held down by a decline in state and local government employment. As of September, total payroll employment had retraced three-fourths of the losses seen at the onset of the pandemic. The unemployment rate declined from 5.2 percent in August to

4.8 percent in September; the unemployment rates for African Americans and Hispanics also declined over this period, but both rates remained well above the national average. The labor force participation rate edged lower in September, and the employment-to-population ratio moved up. Private-sector job openings, as measured by the Job Openings and Labor Turnover Survey, stepped down in August but remained well above pre-pandemic levels. Initial claims for regular state unemployment insurance moved lower through late October and were approaching the levels seen before the pandemic. Recent weekly estimates of private-sector payrolls constructed by the Board's staff using data provided by the payroll processor ADP were especially volatile but, on balance, appeared consistent with a pickup in the pace of private employment gains relative to September. The employment cost index of hourly compensation in the private sector rose 4.1 percent over the 12 months ending in September; this gain was noticeably larger than the index's year-earlier 12-month change and was the fastest 12-month change since 2001.

Total PCE price inflation was 4.4 percent over the 12 months ending in September, and core PCE price inflation, which excludes changes in consumer energy prices and many consumer food prices, was 3.6 percent over the same period. The trimmed mean measure of 12-month PCE inflation constructed by the Federal Reserve Bank of Dallas was 2.3 percent in September. In the third quarter of 2021, the staff's common inflation expectations index, which combines information from many indicators of inflation expectations and inflation compensation, was little changed relative to the second quarter and remained at its highest level since 2014.

Real PCE posted a modest increase in the third quarter after having risen sharply over the first half of the year. The third-quarter slowdown appeared to reflect a combination of factors, including the waning effect of previous fiscal stimulus measures, the surge in COVID-19 cases over the summer, and a plunge in motor vehicle purchases as extremely low dealer inventories constrained sales. Residential investment dropped further in the third quarter; although demand for housing was strong, shortages of construction supplies as well as tight land and labor markets restrained residential construction activity.

Growth in business fixed investment slowed sharply in the third quarter, as supply bottlenecks—particularly for motor vehicles—weighed on business equipment spending and a limited availability of construction materials held back spending on nonresidential structures.

Manufacturing output declined in September. Motor vehicle output stepped down further as semiconductor shortages continued to restrain production; in addition, Hurricane Ida resulted in prolonged plant outages in the petrochemical, refining, and plastic resins industries.

Total real government purchases posted a small increase in the third quarter after having declined in the second quarter. Although real state and local purchases increased, the gain was largely offset by declines in both federal defense and nondefense purchases.

The U.S. international trade deficit widened in August, reflecting a moderate pace of import growth against a subdued pace of export growth. Real import growth was driven by increases in consumer goods and industrial supplies. Real export growth was held back by declines in capital goods, agricultural products, and automotive products. Bottlenecks in the global semiconductor industry continued to weigh on exports and imports of automotive products, and shipping congestion continued to restrain trade overall. Advance estimates for September suggested that goods imports rose while goods exports fell, pointing to a further widening of the trade deficit. The Bureau of Economic Analysis estimated that a drop in net exports subtracted substantially from real GDP growth in the third quarter.

Foreign GDP growth slowed modestly in the third quarter, as supply chain disruptions and the resurgence of COVID-19 weighed on production, particularly in China and other emerging market economies (EMEs). In several EMEs, public health restrictions were reinstated, resulting in factory closures. Moreover, Chinese manufacturing output was curtailed by the rationing of electricity amid a coal shortage resulting in part from policies to lower carbon emissions. In contrast to EMEs, advanced foreign economies (AFEs) generally continued to recover at a solid pace in the third quarter, as the boost from the further reopening of high-contact services activity was only partially offset by the drag from bottlenecks, the spread of the virus, and, in some places, labor shortages. Twelve-month rates of inflation abroad continued to rise, reflecting further increases in energy prices, persistent pressures from supply bottlenecks, and past exchange rate depreciation in some EMEs.

Staff Review of the Financial Situation

Over the intermeeting period, an increase in perceived inflation risks and an associated upward revision in the market-implied path of the federal funds rate contributed to increases in Treasury yields. Long-term sovereign yields in AFEs also increased notably. Despite

these pressures, broad domestic equity indexes increased, on net, supported by strong earnings reports. Spreads of corporate bonds were little changed overall. Short-term funding markets were stable, while participation in the ON RRP facility increased further, to its highest level since the facility was put in place. Market-based financing conditions were accommodative, and bank lending standards eased for most loan categories.

Market participants' views on the expected path for the federal funds rate over the next few years—implied by a straight read of overnight index swap quotes—rose substantially since the September FOMC meeting, apparently in response to perceived risks of higher inflation. Those risks also contributed to increases in Treasury yields, with 2-, 5-, and 10-year yields rising notably on net.

Broad equity indexes increased, on net, over the intermeeting period. Perceptions of increased risks related to inflation were more than offset by a short-term resolution of the debt ceiling, a decrease in perceived risks related to the effect of the pandemic on the pace of the economic recovery, and stronger-than-expected third-quarter earnings. The VIX declined notably to near pre-pandemic levels. Spreads on corporate bonds were little changed, on net, over the intermeeting period and remained at low levels. Spreads of municipal bonds narrowed slightly.

Short-term funding markets were stable over the intermeeting period. The effective federal funds rate remained at 8 basis points throughout the period except on month-ends, while the SOFR averaged 5 basis points. Consistent with relatively low Treasury bill supply and abundant liquidity, participation in ON RRP operations increased from an average of $1.1 trillion over the previous intermeeting period to $1.4 trillion, reaching a new high of $1.6 trillion on the September quarter-end.

In major foreign markets, sovereign yields rose notably over the intermeeting period, as did inflation compensation and market-implied measures of expected policy rates, amid sharp further increases in energy prices, concerns about higher inflation, and communications by some foreign central banks that were seen as signaling a faster removal of monetary policy accommodation. Market concerns about risks of a downturn in the Chinese real estate sector remained elevated, and inflows into funds investing in China slowed, but the effects on broader financial markets were limited. On balance, major foreign equity indexes increased moderately, and the broad dollar appreciated a touch.

In domestic credit markets, financing conditions faced by nonfinancial firms in capital markets remained highly accommodative over the intermeeting period. Gross corporate bond issuance stayed strong in September and October. Gross leveraged loan issuance decreased slightly in September after its strong growth in August. Equity raised through traditional initial public offerings remained robust in September and October, while equity issuance through special purpose acquisition companies remained at the subdued levels seen in recent months.

Commercial and industrial (C&I) loans declined notably in the third quarter amid ongoing forgiveness of Paycheck Protection Program loans. In the October Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), banks reported easing standards and terms, on net, for C&I loans over the third quarter. Banks also reported that demand for C&I loans was about unchanged over the third quarter after strengthening for the previous two quarters; on balance, loan demand was still weaker than before the pandemic.

The credit quality of large nonfinancial corporations remained strong. The volume of credit rating upgrades for speculative-grade nonfinancial corporate bonds outpaced downgrades in September and October. Trailing default rates on corporate bonds and leveraged loans decreased from already low levels, while market indicators of future expected default rates remained benign.

In the municipal bond market, financing conditions remained accommodative despite a modest increase in yields. Issuance of municipal debt was strong in September and October, and indicators of the credit quality of municipal debt remained healthy.

Survey-based indicators suggested that small business owners became less pessimistic about their financial prospects, with the exception of owners in the educational services sector, for whom expectations deteriorated slightly. While loan originations to small businesses fell a bit, the results from the October SLOOS suggested that the decline appeared to reflect weak demand, particularly for small and very small firms.

Commercial real estate loan balances on banks' books strengthened, and, in the October SLOOS, banks reported an easing of standards on such loans over the third quarter. Issuance of commercial mortgage-backed securities (CMBS) remained robust, supported by spreads of agency CMBS generally at or below pre-pandemic levels. Delinquency rates on mortgages in CMBS pools continued to fall but remained elevated for CMBS backed by hotel and retail properties.

In the residential mortgage market, financing conditions remained accommodative, particularly for borrowers who met standard conforming loan criteria. In the October SLOOS, banks reported easing lending standards for almost all major mortgage categories. Mortgage rates increased modestly over the intermeeting period but did not rise as much as the 10-year Treasury yield. Indicators of mortgage originations for home purchases and refinancing remained fairly robust. The share of mortgages in forbearance continued to decline through October, and the rate of new transitions into delinquency stayed low by historical standards.

Financing conditions for consumer credit remained accommodative for most borrowers, especially those with stronger credit scores. Lending standards for nonprime consumers in the credit card market continued to ease but remained slightly tighter than pre-pandemic levels. In the October SLOOS, banks reported easier standards for credit cards and auto loans over the third quarter. While demand for credit cards strengthened, auto loan growth slowed in response to low dealer inventories and a weakening of auto sales.

The staff provided an update on indicators related to the stability of the financial system. The staff noted that asset valuations remained generally high relative to historical norms. In particular, bond and leveraged loan spreads remained narrow, while equity prices continued to increase, supported by strong earnings expectations, still-low Treasury yields, and high risk appetite. House prices rose rapidly, outpacing rents, but the staff did not see signs of loose mortgage underwriting standards or excessive mortgage credit growth that could potentially amplify a shock arising from falling house prices. For households, the level of consumer debt was largely unchanged on an inflation-adjusted basis, while delinquencies returned to pre-pandemic levels or below. For nonfinancial businesses, measures of leverage in the corporate sector fell over the second quarter and largely returned to pre-pandemic levels; in addition, the level of corporate debt became more sustainable as earnings increased and rates remained low. In the financial sector, the staff noted that banks were strongly capitalized, with high levels of stable funding and high-quality liquid assets. The mean level of gross hedge fund leverage was noteworthy and its distribution was skewed, with particularly high leverage among funds in the top decile. Vulnerabilities associated with funding risks remained at money funds and other mutual funds. In addition, funding risks were an emerging concern at entities issuing stablecoins, because they appeared to have structural maturity and liquidity transformation vulnerabilities similar to those for money funds but with considerably less transparency and an underdeveloped regulatory framework. The staff noted that the President's Working Group on Financial Markets was engaged in interagency work to address these risks.

Staff Economic Outlook

The projection for U.S. economic activity prepared by the staff for the November FOMC meeting was slightly weaker than the September projection. Incoming data suggested that the resolution of supply constraints was starting later and would be more gradual than previously assumed; even so, real GDP was expected to post a sizable gain over 2021 as a whole. In 2022, real GDP growth was expected to remain close to its 2021 pace, supported by the continued reopening of the economy and the resolution of supply constraints in most sectors. With the boost from these factors fading, real GDP growth was projected to step down noticeably in 2023 and to be close to potential output growth in 2023 and 2024. However, the level of real GDP was expected to remain well above potential throughout the projection period, and the unemployment rate was expected to decline to historically low levels.

The staff's near-term outlook for inflation was revised up, as consumer food and energy prices had risen faster than expected and production bottlenecks and recent wage gains were seen as putting somewhat greater upward pressure on prices than had been anticipated. As a result, the 12-month change in PCE prices was projected to move up further relative to September's pace and to end the year well above 2 percent. Over the following two years, the boost to consumer prices caused by supply issues was expected to partly reverse, and resource utilization was projected to tighten further. PCE price inflation was therefore expected to step down to 2 percent in 2022 and to 1.9 percent in 2023 before edging back up to 2 percent in 2024.

The staff continued to judge that the risks to the baseline projection for economic activity were skewed to the downside and that the risks around the inflation projection were skewed to the upside. In particular, the possibility of another sizable wave of COVID-19 cases in the winter was seen as an important source of downside risk to activity, while the possibility of more severe and persistent supply issues was viewed as an additional downside risk to activity and as an upside risk to inflation.

Participants' Views on Current Economic Conditions and the Economic Outlook

In their discussion of current conditions, participants noted that, with progress on vaccinations and strong

policy support, indicators of economic activity and employment had continued to strengthen. The sectors most adversely affected by the pandemic had improved in recent months, but the summer's rise in COVID-19 cases had slowed their recovery. Inflation was elevated, largely reflecting factors that were expected to be transitory. Supply and demand imbalances related to the pandemic and the reopening of the economy had contributed to sizable price increases in some sectors. Overall financial conditions remained accommodative, in part reflecting policy measures to support the economy and the flow of credit to U.S. households and businesses. Participants noted that the path of the economy continued to depend on the course of the virus. Progress on vaccinations and an easing of supply constraints were expected to support continued gains in economic activity and employment as well as a reduction in inflation, but risks to the economic outlook remained.

Participants observed that growth in economic activity had slowed in the third quarter to a rate significantly below the robust pace seen in the first half of the year. The spread of the Delta variant had contributed to the slowdown in growth in the third quarter by damping household and business spending, holding down labor supply, and intensifying supply chain disruptions. Participants noted that the underlying conditions supporting growth in demand remained strong and that, as the number of COVID-19 cases remained well below the summer's levels, growth in economic activity would likely show a pickup in the fourth quarter. They further foresaw robust growth in 2022, supported by progress on vaccinations and an easing of supply constraints.

In their discussion of the household sector, participants remarked that demand for most consumer goods had remained strong. They noted that businesses had generally recorded robust sales despite labor shortages and other supply disruptions that had prevented them from fully meeting higher demand for their products. Participants interpreted available data as suggesting that the spread of the Delta variant had slowed the shift of consumer demand toward purchases of services and away from spending on goods, stretching out the full reopening of the economy and intensifying supply and demand imbalances. Participants observed that households had strong balance sheets and that consumer spending would also be supported by accommodative financial conditions. A number of participants noted that there was likely to be a drag on household spending as previous fiscal support faded, or that fiscal policy might provide some support to aggregate demand if the Congress authorized major new federal appropriations.

Participants remarked that supply chain challenges and limited labor availability continued to be major constraints on manufacturing activity and the business sector more broadly. Bottleneck pressures faced by businesses were accompanied by global supply chain disruptions associated with major backlogs in shipments and transportation as well as surging demand for a variety of goods, shortages of labor and other inputs, increases in costs of production, and depleted inventory levels in key sectors. Many business contacts had experienced a worsening of supply chain problems, and participants reported that firms had responded to these challenges by taking a variety of actions, including raising prices, turning away customers, restructuring supply chains, and using alternative, but higher-cost, shipping options. Participants judged that supply constraints would likely continue for longer than they had previously expected.

Participants noted that data received over the intermeeting period indicated that labor market conditions had continued to improve. Although the September increase in payrolls had been moderate compared with recent months, the unemployment rate had declined further and previous months' job growth had been revised up. Participants observed that September's rise in payrolls had been held down by a shortage of workers, in part reflecting the ongoing effect of the virus on labor supply decisions. With COVID-19 cases expected to remain below the summer's levels, participants anticipated better payroll numbers in the months ahead. Participants indicated that District contacts continued to report difficulties in finding and retaining workers and that, in addition to offering higher wages, businesses were turning to increased use of automation.

While recognizing that labor market conditions varied significantly across the country, some participants cited a number of signs that the U.S. labor market was very tight: These included data on quits, job availability, and stronger rates of nominal wage growth reflected in the recent rise in the employment cost index, as well as the readings provided by the Federal Reserve Bank of Kansas City's Labor Market Conditions Indicators. A number of participants observed that the labor force participation rate remained well below the level reached before the pandemic. Several participants judged that labor force participation would be structurally lower than in the past, and a few of these participants cited the high level of retirements recorded since the start of the pandemic. Several other participants suggested that labor supply was currently being depressed by pandemic-related factors such as disruptions related to caregiving ar-

rangements and noted that the importance of such factors would likely diminish as economic and public health conditions improved further.

Participants generally saw the current elevated level of inflation as largely reflecting factors that were likely to be transitory but judged that inflation pressures could take longer to subside than they had previously assessed. They remarked that the Delta wave had intensified the impediments to supply chains and had helped sustain the high level of goods demand, adding to the upward pressure on prices. Participants also observed that increases in energy prices, stronger rates of nominal wage growth, and higher housing rental costs had been forces adding to inflation. Some participants highlighted the fact that price increases had become more widespread. Although participants expected significant inflation pressures to last for longer than they previously expected, they generally continued to anticipate that the inflation rate would diminish significantly during 2022 as supply and demand imbalances abated. Nonetheless, they indicated that their uncertainty regarding this assessment had increased. Many participants pointed to considerations that might suggest that elevated inflation could prove more persistent. These participants noted that average inflation already exceeded 2 percent when measured on a multiyear basis and cited a number of factors—such as businesses' enhanced scope to pass on higher costs to their customers, the possibility that nominal wage growth had become more sensitive to labor market pressures, or accommodative financial conditions—that might result in inflation continuing at elevated levels. Some other participants, however, remarked that although inflationary pressures were lasting longer than anticipated, those pressures continued to reflect the same pandemic-related imbalances and would likely abate when supply constraints eased. These participants also noted that the most sizable price increases may have already occurred, that there was as yet little evidence of a change in inflation dynamics—such as the development of a wage–price spiral—that would tend to prolong elevated levels of inflation, and that forces already in motion would likely bring inflation down toward 2 percent over the medium term. Participants were attentive to the sizable increase in the cost of living that had taken place this year and the associated burden on U.S. households, particularly those who had limited scope to pay higher prices for essential goods and services.

In their comments on inflation expectations, a number of participants discussed the risk that, in light of recent elevated levels of inflation, the public's longer-term expectations of inflation might increase to a level above that consistent with the Committee's longer-run inflation objective; such a development could make it harder for the Committee to achieve 2 percent inflation over the longer run. A couple of participants pointed to increases in survey- and market-based indicators of expected inflation—including the notable rise in the five-year TIPS-based measure of inflation compensation—as possible signs that inflation expectations were becoming less well anchored. Several other participants, however, remarked that measures of near- and medium-term inflation expectations typically had been sensitive to movements in realized inflation and that they had not exhibited greater sensitivity recently. They additionally pointed out that indicators of longer-term inflation expectations—including the five-year, five-year-forward measure of inflation compensation—continued to display less sensitivity to realized inflation and remained well anchored at levels consistent with the Committee's longer-run 2 percent goal.

Participants observed that uncertainty about the economic outlook remained high. They particularly stressed uncertainties associated with the labor market, including the evolution of labor force participation, and with the length of time required to resolve the supply chain situation. Participants cited upside risks to inflation, including those associated with strong demand for goods and a tight labor market. Upside risks to economic activity included a potential near-term boost to aggregate demand that could arise from the drawing down of the substantial savings accumulated by households since the beginning of the pandemic. A few participants mentioned an upsurge in COVID-19 cases during the coming winter or an emergence of new virus strains as possibilities that, if they were realized, would damp economic activity and intensify price pressures.

A number of participants commented on issues related to financial stability. A couple of participants noted factors supporting the strength and resilience of the U.S. financial system, including the solid capital and liquidity conditions of banks and the fact that underwriting standards for residential mortgages had not eased substantially in an environment of rising house prices. A few participants emphasized the importance of maintaining strong bank capital positions, particularly at the largest banks. A few participants also cited a number of factors representing potential vulnerabilities to the financial system: These included elevated asset valuations prevailing widely across asset classes, the growing exposure of

banks to nonbank financial firms, and the risk of a sudden reduction in the liquidity of collateral used at central counterparty clearing and settlement systems. In the area of cybersecurity, a few participants stressed the importance of greater preparedness against a cyberattack that could disrupt the nation's payments process and financial system. Several participants commented on the financial stability risks—including those relating to maturity and liquidity transformation—associated with stablecoins and on the need for regulators to address these risks. A few participants noted the importance of developing systematic monitoring of the climate-related risks facing the financial system.

In their consideration of the stance of monetary policy, participants agreed that the economy had made substantial further progress toward the Committee's goals since December 2020, when the Committee adopted its guidance regarding asset purchases. The unemployment rate had declined to 4.8 percent in September—about 2 percentage points lower than the level last December—and job openings and other indicators also were pointing to widespread strength in labor demand, consistent with a broad improvement in labor market conditions. Consequently, participants assessed that the criterion of substantial further progress had been met with regard to the Committee's maximum employment goal. In addition, participants generally judged that the Committee's criterion of substantial further progress had clearly been more than met with respect to inflation. Against this backdrop, all participants judged that, consistent with the Committee's previous policy communications, it would be appropriate to announce at this meeting a reduction in the pace of net asset purchases. Participants generally supported the plan to implement reductions in the pace of net purchases of Treasury securities and agency MBS by $10 billion and $5 billion per month, respectively, over the upcoming intermeeting period and judged that similar reductions in the pace would likely be appropriate in each subsequent month. Some participants preferred a somewhat faster pace of reductions that would result in an earlier conclusion to net purchases. Participants noted that beginning to scale back the pace of net asset purchases was not intended to convey any direct signal regarding adjustments to the target range for the federal funds rate. They highlighted the more stringent criteria for raising the target range, compared with the criteria that applied to beginning to reduce the pace of asset purchases.

Participants stressed that maintaining flexibility to implement appropriate policy adjustments on the basis of risk-management considerations should be a guiding principle in conducting policy in the current highly uncertain environment. Some participants suggested that reducing the pace of net asset purchases by more than $15 billion each month could be warranted so that the Committee would be in a better position to make adjustments to the target range for the federal funds rate, particularly in light of inflation pressures. Various participants noted that the Committee should be prepared to adjust the pace of asset purchases and raise the target range for the federal funds rate sooner than participants currently anticipated if inflation continued to run higher than levels consistent with the Committee's objectives. At the same time, because of the continuing considerable uncertainty about developments in supply chains, production logistics, and the course of the virus, a number of participants stressed that a patient attitude toward incoming data remained appropriate to allow for careful evaluation of evolving supply chain developments and their implications for the labor market and inflation. That said, participants noted that the Committee would not hesitate to take appropriate actions to address inflation pressures that posed risks to its longer-run price stability and employment objectives.

Committee Policy Action

In their discussion of monetary policy for this meeting, members agreed that with progress on vaccinations and strong policy support, indicators of economic activity and employment had continued to strengthen. They noted that the sectors most adversely affected by the pandemic had improved in recent months but that the summer's rise in COVID-19 cases had slowed their recovery. Inflation was elevated, largely reflecting factors that were expected to be transitory. They remarked that supply and demand imbalances related to the pandemic and the reopening of the economy had contributed to sizable price increases in some sectors. Overall financial conditions remained accommodative, in part reflecting policy measures to support the economy and the flow of credit to U.S. households and businesses. Members also acknowledged that the path of the economy continued to depend on the course of the virus. Progress on vaccinations and an easing of supply constraints were expected to support continued gains in economic activity and employment as well as a reduction in inflation, but risks to the economic outlook remained.

Members agreed that the postmeeting statement should acknowledge that the sectors of the economy most adversely affected by the pandemic had improved in recent months, but that the summer's rise in COVID-19 cases had slowed their recovery. They also concurred that it

would be appropriate to convey less certainty about the path of inflation by noting that the factors driving elevated inflation "are expected to be transitory." In order to provide additional information about these factors, members further decided that the postmeeting statement would say that "supply and demand imbalances related to the pandemic and the reopening of the economy have contributed to sizable price increases in some sectors." Members also agreed to include a sentence stating that "progress on vaccinations and an easing of supply constraints are expected to support continued gains in economic activity and employment as well as a reduction in inflation."

Members agreed that the Federal Reserve was committed to using its full range of tools to support the U.S. economy in this challenging time, thereby promoting its maximum employment and price stability goals. All members reaffirmed that, in accordance with the Committee's goals to achieve maximum employment and inflation at the rate of 2 percent over the longer run, and with inflation having run persistently below this longer-run goal, they would aim to achieve inflation moderately above 2 percent for some time so that inflation averages 2 percent over time and longer-term inflation expectations remain well anchored at 2 percent. Members expected to maintain an accommodative stance of monetary policy until those outcomes were achieved.

In their discussion of monetary policy in the period ahead, members agreed that, in light of the substantial further progress the economy had made toward the Committee's goals since last December, the Committee should begin to slow the pace of its asset purchases at this meeting. Consistent with this approach, the Committee decided to start reducing the monthly pace of its net asset purchases by $10 billion for Treasury securities and $5 billion for agency MBS. Consequently, the Committee agreed that, beginning with the purchase schedule published in mid-November, it would increase its holdings of Treasury securities by at least $70 billion per month rather than $80 billion per month and would increase its holdings of agency MBS by at least $35 billion per month, rather than $40 billion per month.

Because the Open Market Desk would be releasing two monthly purchase schedules between the November and December FOMC meetings, the Committee further decided to add to the postmeeting statement an indication that, beginning in December, the Committee would increase its holdings of Treasury securities by at least $60 billion per month and of agency MBS by at least $30 billion per month.

Members decided the postmeeting statement should state that the Committee judged that similar reductions in the pace of net asset purchases would likely be appropriate in subsequent months, implying that increases in securities holdings would cease by the middle of next year under the Committee's outlook. Members also noted that the Committee was prepared to adjust the pace of purchases if warranted by changes in the economic outlook and agreed that the postmeeting statement should say so. Members agreed that the addition of this language would acknowledge the importance of maintaining flexibility to adjust the stance of policy as appropriate in response to changes in the Committee's outlook for the labor market and inflation. Members agreed that the statement should continue to note that the Committee's ongoing asset purchases helped foster smooth market functioning and accommodative financial conditions. Additionally, members decided to introduce into the postmeeting statement a reference to the Federal Reserve's "holdings of securities" in the sentence describing the economic effects of asset purchases. This addition would make clear that, even after net increases in the SOMA portfolio ceased, the Federal Reserve's elevated securities holdings would continue to support accommodative financial conditions.

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 November 4, 2021, 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 0 to ¼ percent.
> - Complete the increase in System Open Market Account (SOMA) holdings of

Treasury securities by $80 billion and of agency mortgage-backed securities (MBS) by $40 billion, as indicated in the monthly purchase plans released in mid-October.

- Increase the SOMA holdings of Treasury securities by $70 billion and of agency MBS by $35 billion, during the monthly purchase period beginning in mid-November.
- Increase the SOMA holdings of Treasury securities by $60 billion and of agency MBS by $30 billion, during the monthly purchase period beginning in mid-December.
- Increase holdings of Treasury securities and agency MBS by additional amounts as needed to sustain smooth functioning of markets for these securities.
- Conduct overnight repurchase agreement operations with a minimum bid rate of 0.25 percent and with an aggregate operation limit of $500 billion; the aggregate operation limit can be temporarily increased at the discretion of the Chair.
- Conduct overnight reverse repurchase agreement operations at an offering rate of 0.05 percent and with a per-counterparty limit of $160 billion per day; the per-counterparty limit can be temporarily increased at the discretion of the Chair.
- Roll over at auction 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 MBS in agency MBS.
- Allow modest deviations from stated amounts for purchases and 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.:

"The Federal Reserve is committed to using its full range of tools to support the U.S. economy in this challenging time, thereby promoting its maximum employment and price stability goals.

With progress on vaccinations and strong policy support, indicators of economic activity and employment have continued to strengthen. The sectors most adversely affected by the pandemic have improved in recent months, but the summer's rise in COVID-19 cases has slowed their recovery. Inflation is elevated, largely reflecting factors that are expected to be transitory. Supply and demand imbalances related to the pandemic and the reopening of the economy have contributed to sizable price increases in some sectors. Overall financial conditions remain accommodative, in part reflecting policy measures to support the economy and the flow of credit to U.S. households and businesses.

The path of the economy continues to depend on the course of the virus. Progress on vaccinations and an easing of supply constraints are expected to support continued gains in economic activity and employment as well as a reduction in inflation. Risks to the economic outlook remain.

The Committee seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run. With inflation having run persistently below this longer-run goal, the Committee will aim to achieve inflation moderately above 2 percent for some time so that inflation averages 2 percent over time and longer-term inflation expectations remain well anchored at 2 percent. The Committee expects to maintain an accommodative stance of monetary policy until these outcomes are achieved. The Committee decided to keep the target range for the federal funds rate at 0 to ¼ percent and expects it will be appropriate to maintain this target range until labor market conditions have reached levels consistent with the Committee's assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time. In light of the substantial further progress the economy has made toward the Committee's goals since last December, the Committee decided to begin reducing the monthly pace of its net asset purchases by $10 billion for Treasury securities and $5 billion for agency mortgage-backed securities. Beginning later this month, the Committee will increase its holdings of Treasury securities by at least $70 billion per

month and of agency mortgage-backed securities by at least $35 billion per month. Beginning in December, the Committee will increase its holdings of Treasury securities by at least $60 billion per month and of agency mortgage-backed securities by at least $30 billion per month. The Committee judges that similar reductions in the pace of net asset purchases will likely be appropriate each month, but it is prepared to adjust the pace of purchases if warranted by changes in the economic outlook. The Federal Reserve's ongoing purchases and holdings of securities will continue to foster smooth market functioning and accommodative financial conditions, thereby supporting the flow of credit to households and businesses.

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, Thomas I. Barkin, Raphael W. Bostic, Michelle W. Bowman, Lael Brainard, Richard H. Clarida, Mary C. Daly, Charles L. Evans, Randal K. Quarles, and Christopher J. Waller.

Voting against this action: None.

Consistent with the Committee's decision to leave the target range for the federal funds rate unchanged, the Board voted unanimously to maintain the interest rate paid on reserve balances at 0.15 percent, effective November 4, 2021. The Board also voted unanimously to approve establishment of the primary credit rate at the existing level of 0.25 percent, effective November 4, 2021.

Following these actions, the Chair commented on the critical importance of maintaining the public's trust and confidence in the Federal Reserve as an institution. In this regard, the Chair noted the recent announcement of changes in the rules regarding financial investments and transactions for Federal Reserve officials and indicated that efforts were under way to implement these new rules expeditiously.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, December 14–15, 2021. The meeting adjourned at 10:35 a.m. on November 3, 2021.

Notation Vote

By notation vote completed on October 12, 2021, the Committee unanimously approved the minutes of the Committee meeting held on September 21–22, 2021.

James A. Clouse
Secretary