Minutes of the Federal Open Market Committee October 29–30, 2019

A joint meeting of the Federal Open Market Committee and the Board of Governors was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, October 29, 2019, at 9:00 a.m. and continued on Wednesday, October 30, 2019, at 9:00 a.m.¹

PRESENT:

Jerome H. Powell, Chair
John C. Williams, Vice Chair
Michelle W. Bowman
Lael Brainard
James Bullard
Richard H. Clarida
Charles L. Evans
Esther L. George
Randal K. Quarles
Eric Rosengren

- Patrick Harker, Robert S. Kaplan, Neel Kashkari, Loretta J. Mester, and Michael Strine, Alternate Members of the Federal Open Market Committee
- Thomas I. Barkin, Raphael W. Bostic, and Mary C. Daly, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively

James A. Clouse, Secretary
Matthew M. Luecke, Deputy Secretary
David W. Skidmore, Assistant Secretary
Michelle A. Smith, Assistant Secretary
Mark E. Van Der Weide, General Counsel
Michael Held, Deputy General Counsel
Steven B. Kamin, Economist
Thomas Laubach, Economist
Stacey Tevlin, Economist

Rochelle M. Edge, Eric M. Engen, Anna Paulson, Christopher J. Waller, William Wascher, and Beth Anne Wilson, Associate Economists

Lorie K. Logan, Manager pro tem, System Open Market Account Ann E. Misback, Secretary, Office of the Secretary, Board of Governors

- Eric Belsky,² Director, Division of Consumer and Community Affairs, Board of Governors; Matthew J. Eichner,³ Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors; Andreas Lehnert, Director, Division of Financial Stability, Board of Governors
- Jennifer J. Burns, Deputy Director, Division of Supervision and Regulation, Board of Governors; Daniel M. Covitz, Deputy Director, Division of Research and Statistics, Board of Governors; Michael T. Kiley, Deputy Director, Division of Financial Stability, Board of Governors; Trevor A. Reeve, Deputy Director, Division of Monetary Affairs, Board of Governors
- Jon Faust, Senior Special Adviser to the Chair, Office of Board Members, Board of Governors
- Joshua Gallin, Special Adviser to the Chair, Office of Board Members, Board of Governors
- Brian M. Doyle, Wendy E. Dunn, Joseph W. Gruber, Ellen E. Meade, and Ivan Vidangos, Special Advisers to the Board, Office of Board Members, Board of Governors
- Linda Robertson, Assistant to the Board, Office of Board Members, Board of Governors
- Shaghil Ahmed, Senior Associate Director, Division of International Finance, Board of Governors; David E. Lebow, Senior Associate Director, Division of Research and Statistics, Board of Governors
- Antulio N. Bomfim, Senior Adviser, Division of Monetary Affairs, Board of Governors

¹ The Federal Open Market Committee is referenced as the "FOMC" and the "Committee" in these minutes.

² Attended the discussion of the review of monetary policy strategy, tools, and communication practices.

³ Attended through the discussion of the review of options for repo operations to support control of the federal funds rate.

- Michael Hsu,⁴ Associate Director, Division of Supervision and Regulation, Board of Governors; David López-Salido and Min Wei, Associate Directors, Division of Monetary Affairs, Board of Governors
- Glenn Follette, Deputy Associate Director, Division of Research and Statistics, Board of Governors; Christopher J. Gust, Deputy Associate Director, Division of Monetary Affairs, Board of Governors; Jeffrey D. Walker,³ Deputy Associate Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors; Paul R. Wood,² Deputy Associate Director, Division of International Finance, Board of Governors
- Eric C. Engstrom, Senior Adviser, Division of Research and Statistics, and Deputy Associate Director, Division of Monetary Affairs, Board of Governors
- Stephanie E. Curcuru, Assistant Director, Division of International Finance, Board of Governors; Giovanni Favara, Laura Lipscomb,⁴ Zeynep Senyuz,⁴ and Rebecca Zarutskie,² Assistant Directors, Division of Monetary Affairs, Board of Governors; Shane M. Sherlund, Assistant Director, Division of Research and Statistics, Board of Governors
- Penelope A. Beattie,⁵ Section Chief, Office of the Secretary, Board of Governors; Matthew Malloy,⁴ Section Chief, Division of Monetary Affairs, Board of Governors
- Mark A. Carlson,³ Senior Economic Project Manager, Division of Monetary Affairs, Board of Governors
- David H. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Alyssa G. Anderson,⁴ Anna Orlik, and Bernd Schlusche,² Principal Economists, Division of Monetary Affairs, Board of Governors; Cristina Fuentes-Albero² and Christopher J. Nekarda,⁶
- ⁴ Attended the discussion of developments in financial markets and open market operations through the discussion of the review of options for repo operations to support control of the federal funds rate.

- Principal Economists, Division of Research and Statistics, Board of Governors
- Valerie Hinojosa, Senior Information Manager, Division of Monetary Affairs, Board of Governors
- Kelly J. Dubbert, First Vice President, Federal Reserve Bank of Kansas City
- David Altig, Kartik B. Athreya, Jeffrey Fuhrer, and Glenn D. Rudebusch, Executive Vice Presidents, Federal Reserve Banks of Atlanta, Richmond, Boston, and San Francisco, respectively
- Angela O'Connor,⁴ Marc Giannoni,² Paolo A. Pesenti, Samuel Schulhofer-Wohl,⁴ Raymond Testa,⁴ and Nathaniel Wuerffel,⁴ Senior Vice Presidents, Federal Reserve Banks of New York, Dallas, New York, Chicago, New York, and New York, respectively
- Satyajit Chatterjee, Richard K. Crump,⁶ George A. Kahn, Rebecca McCaughrin,⁴ and Patricia Zobel,⁷ Vice Presidents, Federal Reserve Banks of Philadelphia, New York, Kansas City, New York, and New York, respectively
- Larry Wall,² Executive Director, Federal Reserve Bank of Atlanta
- Edward S. Prescott, Senior Economic and Policy Advisor, Federal Reserve Bank of Cleveland
- Nicolas Petrosky-Nadeau,⁶ Senior Research Advisor, Federal Reserve Bank of San Francisco
- Stefania D'Amico² and Thomas B. King,² Senior Economists and Research Advisors, Federal Reserve Bank of Chicago
- Alex Richter, Senior Research Economist and Advisor, Federal Reserve Bank of Dallas
- Benjamin Malin, Senior Research Economist, Federal Reserve Bank of Minneapolis

⁵ Attended through the discussion of developments in financial markets and open market operations.

⁶ Attended the discussion of economic developments and the outlook.

⁷ Attended the discussion of developments in financial markets and open market operations through the end of the meeting.

Review of Monetary Policy Strategy, Tools, and Communication Practices

Committee participants continued their discussions related to the ongoing review of the Federal Reserve's monetary policy strategy, tools, and communication practices. Staff briefings provided an assessment of a range of monetary policy tools that the Committee could employ to provide additional economic stimulus and bolster inflation outcomes, particularly in future episodes in which the policy rate would be constrained by the effective lower bound (ELB). The staff first discussed policy rate tools, focusing on three forms of forward guidance—qualitative, which provides a nonspecific indication of the expected duration of accommodation; date-based, which specifies a date beyond which accommodation could start to be reduced; and outcomebased, which ties the possible start of a reduction of accommodation to the achievement of certain macroeconomic outcomes. The briefing addressed communications challenges associated with each form of forward guidance, including the need to avoid conveying a more negative economic outlook than the FOMC expects. Nonetheless, the staff suggested that forward guidance generally had been effective in easing financial conditions and stimulating economic activity in circumstances when the policy rate was above the ELB and when it was at the ELB. The briefing also discussed negative interest rates, a policy option implemented by several foreign central banks. The staff noted that although the evidence so far suggested that this tool had provided accommodation in jurisdictions where it had been employed, there were also indications of possible adverse side effects. Moreover, differences between the U.S. financial system and the financial systems of those jurisdictions suggested that the foreign experience may not provide a useful guide in assessing whether negative rates would be effective in the United States.

The second part of the staff briefing focused on balance sheet policy tools. The staff discussed the benefits and costs associated with the large-scale asset purchase programs implemented by the Federal Reserve after the financial crisis. In general, the staff's review of the historical experience suggested that the benefits of large-scale asset purchase programs were significant and that many of the potential costs of such programs identified at the time either did not materialize or materialized to a smaller degree than initially feared. In addition, the staff presentation noted that—taking account of investor expectations ahead of the announcement of each new program—the effects of asset purchases did not appear to have diminished materially across consecutive programs.

However, going forward, such policies might not be as effective because longer-term interest rates would likely be much lower at the onset of a future asset purchase program than they were before the financial crisis. The staff also compared the benefits and costs associated with asset purchase programs that are of a fixed cumulative size and those that are flow-based—where purchases continue at a specific pace until certain macroeconomic outcomes are achieved—and examined the potential effectiveness of using asset purchases to place ceilings on interest rates. The briefing also discussed lending programs that could facilitate the flow of credit to households or businesses.

Participants discussed the relative merits of qualitative, date-based, and outcome-based forward guidance. A number of participants noted that each of these three forms of forward guidance could be effective in providing accommodation, depending on circumstances both at and away from the ELB. They also suggested that different types of forward guidance would likely be needed to address varying economic conditions, and that the communications regarding forward guidance needed to be tailored to explain the Committee's evaluation of the economic outlook. In particular, several participants emphasized that to guard against the possibility of adverse feedback loops in which forward guidance is interpreted by the public as a sign of a sharply deteriorating economic outlook, thus leading households and businesses to become even more cautious in their spending decisions, the Committee would need to clearly communicate how its announced policy could help promote better economic outcomes. Participants saw both benefits and costs associated with outcome-based forward guidance relative to other forms of forward guidance. On the one hand, relative to qualitative or date-based forward guidance, outcome-based forward guidance has the advantage of creating an explicit link between future monetary policy actions and macroeconomic conditions, thereby helping to support economic stabilization efforts and foster transparency and accountability. On the other hand, outcome-based forward guidance could be complex and difficult to explain and, hence, could potentially be less effective than qualitative or date-based forward guidance if those hurdles could not be overcome. A few participants commented that outcomebased forward guidance, tied to inflation outcomes, could be a useful tool to reinforce the Committee's commitment to its symmetric 2 percent objective.

Participants also discussed the benefits and costs of using different types of balance sheet policy. Participants

generally agreed that the balance sheet policies implemented by the Federal Reserve after the crisis had eased financial conditions and had contributed to the economic recovery, and that those tools had become an important part of the Committee's current toolkit. However, some participants pointed out that research had produced a sizable range of estimates of the magnitude of the economic effects of balance sheet actions. In addition, some participants noted that the effectiveness of these tools might be diminished in the future, as longerterm interest rates have declined to very low levels and would likely be even lower following an adverse shock that could lead to the resumption of large-scale asset purchases; as a result, there might be limited scope for balance sheet tools to provide accommodation. Several participants commented on the advantages and disadvantages of flow-based asset purchase programs tied to the achievement of economic outcomes. On the one hand, such programs adjusted automatically in response to the performance of the economy and, hence, were more straightforward to implement and communicate. On the other hand, flow-based asset purchase programs may result in the balance sheet rising to undesirable levels. A few participants also commented that, barring significant dislocations to particular segments of the markets, they would restrict asset purchases to Treasury securities to avoid perceptions that the Federal Reserve was engaging in credit allocation across sectors of the economy.

In considering policy tools that the Federal Reserve had not used in the recent past, participants discussed the benefits and costs of using balance sheet tools to cap rates on short- or long-maturity Treasury securities through open market operations as necessary. A few participants saw benefits to capping longer-term interest rates that more directly influence household and business spending. In addition, capping longer-maturity interest rates using balance sheet tools, if judged as credible by market participants, might require a smaller amount of asset purchases to provide a similar amount of accommodation as a quantity-based program purchasing longer-maturity securities. However, many participants raised concerns about capping long-term rates. Some of those participants noted that uncertainty regarding the neutral federal funds rate and regarding the effects of rate ceiling policies on future interest rates and inflation made it difficult to determine the appropriate level of the rate ceiling or when that ceiling should be removed; that maintaining a rate ceiling could result in an elevated level of the Federal Reserve's balance sheet or significant volatility in its size or maturity composition; or that managing longer-term interest rates might be seen as interacting with the federal debt management process. By contrast, a majority of participants saw greater benefits in using balance sheet tools to cap shorter-term interest rates and reinforce forward guidance about the near-term path of the policy rate.

All participants judged that negative interest rates currently did not appear to be an attractive monetary policy tool in the United States. Participants commented that there was limited scope to bring the policy rate into negative territory, that the evidence on the beneficial effects of negative interest rates abroad was mixed, and that it was unclear what effects negative rates might have on the willingness of financial intermediaries to lend and on the spending plans of households and businesses. Participants noted that negative interest rates would entail risks of introducing significant complexity or distortions to the financial system. In particular, some participants cautioned that the financial system in the United States is considerably different from those in countries that implemented negative interest rate policies, and that negative rates could have more significant adverse effects on market functioning and financial stability here than abroad. Notwithstanding these considerations, participants did not rule out the possibility that circumstances could arise in which it might be appropriate to reassess the potential role of negative interest rates as a policy tool.

Overall, participants generally agreed that the forward guidance and balance sheet policies followed by the Federal Reserve after the financial crisis had been effective in providing stimulus at the ELB. With estimates of equilibrium real interest rates having declined notably over recent decades, policymakers saw less room to reduce the federal funds rate to support the economy in the event of a downturn. In addition, against a background of inflation undershooting the symmetric 2 percent objective for several years, some participants raised the concern that the scope to reduce the federal funds rate to provide support to economic activity in future recessions could be reduced further if inflation shortfalls continued and led to a decline in inflation expectations. Therefore, participants generally agreed it was important for the Committee to keep a wide range of tools available and employ them as appropriate to support the economy. Doing so would help ensure the anchoring of inflation expectations at a level consistent with the Committee's symmetric 2 percent inflation objective.

Some participants noted that the form of the policy response would depend critically on the circumstances the Committee faced at the time. Several participants suggested that communicating to the public clearly and convincingly in advance about how the Committee intended to provide accommodation at the ELB would enhance public confidence and support the effectiveness of whichever tool the Committee selected. Some participants thought it would be helpful for the Committee to evaluate how its tools could be utilized in different economic scenarios, such as when longer-term interest rates were significantly below current levels, and discuss which actions would best address the challenges posed by each scenario. Several participants noted that, particularly if monetary policy became severely constrained at the ELB, expansionary fiscal policy would be especially important in addressing an economic downturn.

Participants expected that, at upcoming meetings, they would continue their deliberations on the Committee's review of the monetary policy framework as well as the Committee's Statement on Longer-Run Goals and Monetary Policy Strategy. They also generally agreed that the Committee's consideration of possible modifications to its policy strategy, tools, and communication practices would take some time and that the process would be careful, deliberate, and patient. A number of participants judged that the review could be completed around the middle of 2020.

Developments in Financial Markets and Open Market Operations

The manager pro tem first reviewed developments in financial markets over the intermeeting period. Early in the period, market participants focused on signs of weakness in U.S. economic data with some soft data from business surveys viewed as substantiating concerns that global headwinds were spilling over to the U.S. economy. Later in the period, markets responded to news suggesting favorable developments around Brexit and a partial U.S.-China trade deal. On balance, U.S. financial conditions ended the period little changed.

Regarding the outlook for U.S. monetary policy, the Open Market Desk's surveys and market-based indicators pointed to a high likelihood of a 25 basis point cut in the target range at the October meeting. The probability that survey respondents placed on this outcome was broadly similar to the probability of a 25 basis point cut ahead of the July and September meetings. Further ahead, the path implied by the medians of survey respondents' modal forecasts for the federal funds rate remained essentially flat after this meeting. Meanwhile, the

market-implied path suggested that investors expected around 25 basis points of additional easing by the end of 2020, after the anticipated easing at this meeting.

The manager pro tem next turned to a review of money market developments since early October. On October 11, the Committee announced its decision to maintain reserves at or above the level that prevailed in early September through a program of Treasury bill purchases and repurchase agreement (repo) operations. After the announcement, the Desk conducted regular operations that offered at least \$75 billion in overnight repo funding and between \$135 and \$170 billion in term funding. These operations fostered conditions that helped maintain the federal funds rate within the target range through two channels. First, they provided funding in repo markets that dampened repo market pressure that would otherwise have passed through to the federal funds market, and second, they increased the supply of reserves in the banking system. In anticipation of another projected sharp decline in reserves and expected rate pressures around October 31, the Desk announced an increase in the size of overnight repos to \$120 billion, and an increase in the size of the two term repo operations that crossed the October month-end to \$45 billion.

With respect to purchases of Treasury bills for reserve management purposes, the Desk had purchased more than half of the initial \$60 billion monthly amount for October, and propositions at the five operations conducted to date had been strong. Respondents to the Desk surveys expected reserve management purchases of Treasury bills to continue at the same pace for some time. The combination of repo operations and bill purchases lifted reserve levels above those observed in early September.

The manager pro tem noted that diminished willingness of some dealers to intermediate across money markets ahead of the year-end could result in upward pressure on short-term money market rates. Forward measures of market pricing continued to indicate expectations for such pressures around the year-end. The Desk planned to continue its close monitoring of reserves and money market conditions, as well as dealer participation in repo operations, particularly given balance sheet constraints heading into year-end. The Desk discussed its intentions to further adjust operations around year-end as needed to mitigate the risk of money market pressures that could adversely affect policy implementation, and to maintain over time a level of reserve balances at or above those that prevailed in early September.

The manager pro tem finished by noting that the Federal Reserve Bank of New York would soon release a request for public comment on a plan to publish a series of backward looking Secured Overnight Financing Rate (SOFR) averages and a daily SOFR index to support the transition away from instruments based on LIBOR (London interbank offered rate). Publication of these series was expected to begin in the first half of 2020.

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.

Review of Options for Repo Operations to Support Control of the Federal Funds Rate

The staff briefed participants on the recent experience with using repo operations to support control of the federal funds rate and on possibly maintaining a role for repo operations in the monetary policy implementation framework over the longer run. Ongoing capacity for repo operations could be viewed as useful in an amplereserves regime as a way of providing insurance against unexpected stresses in money markets that could drive the federal funds rate outside the Committee's target range over a sustained period. The staff presented two potential approaches for conducting repo operations if the Committee decided to maintain an ongoing role for such operations. Under the first approach, the Desk would conduct modestly sized, relatively frequent repo operations designed to provide a high degree of readiness should the need for larger operations arise; under the second approach, the FOMC would establish a standing fixed-rate facility that could serve as an automatic money market stabilizer.8 Assessing these two approaches involved several considerations, including the degree of assurance of control over the federal funds rate, the likelihood that participation in the Federal Reserve's repo operations could become stigmatized, the possibility that the operations could encourage the Federal Reserve's counterparties to take on excessive liquidity risks in their portfolios, and the potential disintermediation of financial transactions currently undertaken by private counterparties. Regular, modestly sized repo operations likely would pose relatively little risk of stigma or moral hazard, but they may provide less assurance of control over the federal funds rate because it might be difficult for the Federal Reserve to anticipate money market pressures and scale up its repo operations accordingly. A standing fixed-rate repo facility would likely provide substantial assurance of control over the federal funds rate, but use of the facility could become stigmatized, particularly if the rate was set at a relatively high level. Conversely, a standing facility with a rate set at a relatively low level could result in larger and more frequent repo operations than would be appropriate. And by effectively standing ready to provide a form of liquidity on an as-needed basis, such a facility could increase the risk that some institutions may take on an undesirably high amount of liquidity risk.

In their comments following the staff presentation, participants emphasized the importance of maintaining reserves at a level consistent with the Committee's choice of an ample-reserves monetary policy implementation framework, in which control over the level of the federal funds rate is exercised primarily through the setting of the Federal Reserve's administered rates and in which active management of the supply of reserves is not required. Some participants indicated that, in such an environment, they would have some tolerance for allowing the federal funds rate to vary from day to day and to move occasionally outside its target range, especially in those instances associated with easily identifiable technical events; a couple of participants expressed discomfort with such misses.

Participants expressed a range of views on the relative merits of the two approaches described by the staff for conducting repo operations. Many participants noted that, once an ample supply of reserves is firmly established, there might be little need for a standing repo facility or for frequent repo operations. Some of these participants indicated that a basic principle in implementing an ample-reserves framework is to maintain reserves on an ongoing basis at levels that would obviate the need for open market operations to address pressures in funding markets in all but exceptional circumstances. Many participants remarked, however, that even in an environment with ample reserves, a standing facility could serve as a useful backstop to support control of the federal funds rate in the event of outsized shocks to the system. Several of these participants also suggested that, if a standing facility were created that allowed banks to monetize a portion of their securities holdings at times of market stress, banks could possibly reduce their demand for reserves in normal times, which

⁸ The staff briefed the Committee in June 2019 on the possible role of a standing repo facility in the monetary policy implementation framework.

could make it feasible for the monetary policy implementation framework to operate with a significantly smaller quantity of reserves than would otherwise be needed. A couple of participants pointed out that establishing a standing facility would be similar to the practice of some other major central banks. A number of participants noted that, before deciding whether to implement a standing repo facility, additional work would be necessary to assess the likely implications of different design choices for a standing repo facility, such as pricing, eligible counterparties, and the set of acceptable collateral. Echoing issues raised at the Committee's June 2019 meeting, various participants commented on the need to carefully evaluate these design choices to guard against the potential for moral hazard, stigma, disintermediation risk, or excessive volatility in the Federal Reserve's balance sheet. A couple of other participants suggested that an approach based on modestly sized, frequent repo operations that could be quickly and substantially ramped up in response to emerging market pressures would mitigate the moral hazard, disintermediation, and stigmatization risks associated with a standing repo facility.

Participants made no decisions at this meeting on the longer-run role of repo operations in the ample-reserves regime or on an approach for conducting repo operations over the longer run. They generally agreed that they should continue to monitor the market effects of the Federal Reserve's ongoing repo operations and Treasury bill purchases and that additional analysis of the recent period of money market dislocations or of fluctuations in the Federal Reserve's non-reserve liabilities was warranted. Some participants called for further research on the role that the financial regulatory environment or other factors may have played in the recent dislocations.

Staff Review of the Economic Situation

The information available for the October 29–30 meeting indicated that labor market conditions remained strong and that real gross domestic product (GDP) increased at a moderate rate in the third quarter. Consumer price inflation, as measured by the 12-month percentage change in the price index for personal consumption expenditures (PCE), remained below 2 percent in August. Survey-based measures of longer-run inflation expectations were little changed.

Total nonfarm payroll employment expanded at a slower pace in September than in the previous two months, but the average pace for the third quarter was similar to that for the first half of the year. However, the pace of job gains so far this year was slower than last year, even after accounting for the anticipated effects of the Bureau of Labor Statistics' benchmark revision to payroll employment, which will be incorporated in the published data in February 2020. The unemployment rate moved down to a 50-year low of 3.5 percent in September, while the labor force participation rate held steady and the employment-to-population ratio moved up. The unemployment rates for Asians, Hispanics, and whites each moved lower in September, but the rate for African Americans was unchanged; the unemployment rate for each group was below its level at the end of the previous economic expansion, though persistent differentials between these rates remained. The average share of workers employed part time for economic reasons in September continued to be below its level in late 2007. The rate of private-sector job openings declined in August, and the rate of quits also edged down, but both readings were still at relatively elevated levels. The four-week moving average of initial claims for unemployment insurance benefits through mid-October remained near historically low levels. Average hourly earnings for all employees rose 2.9 percent over the 12 months ending in September, roughly similar to the pace a year earlier.

Total consumer prices, as measured by the PCE price index, increased 1.4 percent over the 12 months ending in August. Core PCE price inflation (which excludes changes in consumer food and energy prices) was 1.8 percent over that same 12-month period, while consumer food price inflation was well below core inflation, and consumer energy prices declined. The trimmed mean measure of 12-month PCE price inflation constructed by the Federal Reserve Bank of Dallas remained at 2 percent in August. The consumer price index (CPI) rose 1.7 percent over the 12 months ending in September, while core CPI inflation was 2.4 percent. Recent readings on survey-based measures of longer-run inflation expectations—including those from the University of Michigan Surveys of Consumers, the Blue Chip Economic Indicators, and the Desk's Survey of Primary Dealers and Survey of Market Participants—were little changed, on balance, although the Michigan survey measure ticked down to the low end of its recent range.

Real PCE rose solidly in the third quarter following a stronger gain in the second quarter. Overall consumer spending rose steadily in recent months, and sales of light motor vehicles through September maintained their robust second-quarter pace. Key factors that influence consumer spending—including the low unemployment rate, further gains in real disposable income, high levels of households' net worth, and generally low borrowing rates—were supportive of solid real PCE growth in the near term. The Michigan survey measure of consumer

sentiment rose again in October and had mostly recovered from its August slump, while the Conference Board survey measure of consumer confidence remained at a favorable level.

Real residential investment turned up solidly in the third quarter following six consecutive quarters of contraction. This upturn was consistent with the rise in single-family starts in the third quarter, and building permits for such units—which tend to be a good indicator for the underlying trend in the construction of such homes—also increased. Both new and existing home sales increased, on net, in August and September. Taken together, the data on construction and sales suggested that the decline in mortgage rates since late 2018 was starting to show through to housing activity.

Real nonresidential private fixed investment declined further in the third quarter. Nominal shipments of nondefense capital goods excluding aircraft decreased over August and September, and forward-looking indicators generally pointed to continued softness in business equipment spending. Orders for nondefense capital goods excluding aircraft decreased over those two months and were still below the level of shipments, most measures of business sentiment deteriorated, analysts' expectations of firms' longer-term profit growth declined somewhat further, and concerns about trade developments continued to weigh on firms' investment decisions. Business expenditures for nonresidential structures decreased markedly further in the third quarter, and the number of crude oil and natural gas rigs in operation—an indicator of business spending for structures in the drilling and mining sector—continued to decline through mid-October.

Industrial production declined in September and was notably lower than at the beginning of the year. Production in September was held down by the strike at General Motors, and automakers' schedules indicated that assemblies of light motor vehicles would remain low in October before rebounding in November. Overall manufacturing production appeared likely to remain soft in coming months, reflecting generally weak readings on new orders from national and regional manufacturing surveys, declining domestic business investment, weak GDP growth abroad, and a persistent drag from trade developments.

Total real government purchases rose at a slower pace in the third quarter than in the second quarter. Real federal purchases decelerated, reflecting smaller increases in both defense and nondefense spending. Federal hiring of temporary workers for next year's decennial census was quite modest during the quarter. Real purchases by state and local governments also rose at a slower pace, as the boost from a faster expansion in state and local payrolls was partially offset by a decrease in real construction spending by these governments.

The nominal U.S. international trade deficit widened in August, reflecting a subdued pace of export growth and a moderate pace of import growth. Export growth was subdued due to lackluster exports of services and capital goods. Advance estimates for September suggested that goods imports fell more than exports, pointing to a narrowing of the monthly trade deficit. The Bureau of Economic Analysis estimated that net exports made a slight negative contribution to real GDP growth in the third quarter.

Incoming data suggested that growth in the foreign economies remained subpar in the third quarter. In several advanced foreign economies (AFEs), indicators showed continued weakness in the manufacturing sector, especially in the euro area and the United Kingdom. Similarly, GDP growth remained subdued in China and several other emerging economies in Asia, and indicators suggested that growth in Latin America also remained weak. Foreign inflation appeared to have moderated a bit in the third quarter, reflecting declines in energy prices. Inflation remained relatively low in most foreign economies.

Staff Review of the Financial Situation

Investor sentiment weakened over the early part of the intermeeting period, reflecting a few weaker-than-expected domestic data releases, but later strengthened on increased optimism regarding ongoing trade negotiations between the United States and China and positive Brexit news. On net, equity prices and corporate bond spreads were little changed, and the Treasury yield curve steepened a bit. Financing conditions for businesses and households remained generally supportive of spending and economic activity.

September FOMC communications were viewed as slightly less accommodative than expected, with investors reportedly surprised by the Summary of Economic Projections showing that a majority of FOMC participants anticipated no further easing this year. Incoming data early in the intermeeting period—particularly the disappointing readings on business activity—prompted a decline in the market-implied path for the policy rate, but that decline was later partly reversed as market participants apparently grew more optimistic on the prospects for a U.S.—China trade deal and Brexit negotiations. Late in the period, quotes on federal funds futures

options contracts indicated that market participants assigned a very high probability to a 25 basis point reduction in the target range of the federal funds rate at the October FOMC meeting. In addition, market-implied expectations for the federal funds rate at year-end and next year moved down.

Yields on nominal U.S. Treasury securities moved down in the early part of the intermeeting period but later retraced their declines. On net, the Treasury yield curve steepened a bit, mostly reflecting a modest decline in short-term yields. Measures of inflation compensation over the next 5 years and 5 to 10 years ahead based on Treasury Inflation-Protected Securities inched down and remained near multiyear low levels.

Broad stock price indexes fell by as much as 4 percent during the first half of the intermeeting period but recovered afterward, ending the period roughly unchanged. Option-implied volatility on the S&P 500 index declined slightly and ended the period below the middle of its historical distribution. On net, corporate credit spreads were little changed.

Domestic short-term funding markets were volatile in mid-September and exhibited additional, albeit modest, pressures around the September quarter-end and the mid-October Treasury settlement date. These pressures were alleviated in part by the Desk's overnight and term repo operations that began on September 17. After smoothing through rate volatility over the period, interest rates for overnight unsecured and secured funding declined roughly in line with the reduction in the target range for the federal funds rate at the September FOMC meeting and the associated 30 basis point decrease in the interest on excess reserves (IOER) rate. The effective federal funds rate (EFFR) was more volatile than usual over the intermeeting period, with the EFFR-IOER spread ranging between 2 basis points and 10 basis points. Rates on overnight commercial paper (CP) and short-term negotiable certificates of deposit declined fairly quickly following the announcement of Desk operations on September 17, although some CP rates remained elevated into October. The FOMC's October 11 announcement of Treasury bill purchases and repo operations to maintain reserves at or above their early-September level appeared to improve expectations about funding market conditions through the remainder of the year. These communications reportedly did not materially affect yields on longer-term Treasury securities.

Financial markets in the AFEs followed a pattern similar to that seen in the United States. AFE financial conditions tightened early in the intermeeting period on disappointing activity data, both in the United States and abroad, and subsequently recovered on perceived better prospects for trade and Brexit negotiations. Movements in the exchange value of the dollar against most currencies were relatively modest, and the broad dollar index declined slightly. Relative to the dollar, the British pound appreciated on Brexit developments, and the Argentinian peso continued to depreciate amid the country's political developments.

The mid-September increases in U.S. Treasury repo rates spilled over to borrowing rates in the international dollar funding market. However, the measures taken by the Federal Reserve to keep the federal funds rate in the target range also calmed dollar funding conditions in the foreign exchange swap market.

Financing conditions for nonfinancial businesses remained generally accommodative during the intermeeting period. Gross issuance of corporate bonds, which was strong in September, experienced a typical seasonal decline in October. Gross issuance of institutional leveraged loans remained solid but slightly below 2019 monthly averages. Meanwhile, growth of commercial and industrial (C&I) loans at banks was modest in the third quarter as a whole. Respondents to the October 2019 Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) reported that borrower demand weakened for C&I loans over the third quarter, while lending standards on such loans were about unchanged. Gross equity issuance through both initial and seasoned offerings picked up to a strong pace in September but moderated in October. The credit quality of nonfinancial corporations deteriorated slightly in recent months but remained solid on balance. Credit conditions for both small businesses and municipalities stayed accommodative on net.

In the commercial real estate (CRE) sector, financing conditions also remained generally accommodative. The volume of agency and non-agency commercial mortgage-backed securities issuance was strong in September, in part supported by recent declines in interest rates. Growth of CRE loans on banks' books was little changed in the third quarter. Banks in the October SLOOS reported tighter lending standards for all types of CRE loans; they also reported weaker demand for construction lending and stronger demand for the other CRE lending categories.

Financing conditions in the residential mortgage market remained accommodative on balance. Mortgage rates were little changed since the September FOMC meeting and stayed near their lowest level since mid-2016. In September, home-purchase originations remained around the relatively high level seen during the previous two months, while refinancing originations jumped to their highest level since late 2012. In the October SLOOS, banks left their lending standards basically unchanged for most residential real estate loan categories over the third quarter. However, for subprime loans, a moderate net percentage of banks reported tightening standards.

Financing conditions in consumer credit markets remained generally supportive of household spending, although conditions continued to be tight for credit card borrowers with nonprime credit scores. Interest rates on auto loans fell, on net, since the beginning of the year, and interest rates on credit card accounts leveled off through August. According to the October SLOOS, commercial banks tightened their standards on credit cards and other consumer loans over the third quarter. Additionally, banks reported that their standards on auto loans and their willingness to make consumer installment loans were about unchanged on balance.

The staff provided an update on its assessments of potential risks to financial stability. On balance, the staff characterized the financial vulnerabilities of the U.S. financial system as moderate. The staff judged that, for many asset classes, valuation pressures eased over the past year. Appetite for risk in the leveraged loan market remained elevated, but less so than last year, especially for lower-rated loans. In addition, CRE prices remained high relative to rental income. In assessing vulnerabilities stemming from borrowing in the household and business sectors, the staff noted that, while household borrowing continued to decline relative to nominal GDP, business leverage remained at or near record-high levels. The risks associated with leverage at financial institutions were viewed as being low, as they have been for some time, largely because of high capital ratios at large banks. Nonetheless, the staff noted that the resilience of financial institutions could be undermined by low interest rates and banks' announced plans to increase payouts to shareholders. The staff assessed vulnerabilities stemming from funding risk as modest. In addition, the staff discussed the potential for liquidity transformation by open-ended mutual funds investing in bank loans to lead to market dislocations under stress scenarios, while noting that outflows from such funds have not often been associated with such dislocations.

Staff Economic Outlook

The projection for U.S. real GDP growth prepared by the staff for the October FOMC meeting was revised down a little for the second half of this year relative to the previous projection. This revision reflected the estimated effects of the strike at General Motors along with some other small factors. Even without this downward revision, real GDP was forecast to rise more slowly in the second half of the year than in the first half, mostly because of continued soft business investment and slower increases in government spending. The mediumterm projection for real GDP growth was essentially unchanged, as revisions to the staff's assumptions about factors on which the forecast was conditioned, such as financial market variables, were small and offsetting. Real GDP was expected to decelerate modestly over the medium term, mostly because of a waning boost from fiscal policy. Output was forecast to expand at a rate a little above the staff's estimate of its potential rate of growth in 2019 and 2020 and then to slow to a pace slightly below potential output growth in 2021 and 2022. The unemployment rate was projected to be roughly flat through 2022 and to remain below the staff's estimate of its longer-run natural rate.

The staff's forecast for core PCE price inflation this year was revised down a little in response to recent data. Beyond this year, the projection for core inflation was unrevised, and the forecast for total inflation was a little lower in 2020 because of a downward revision in projected consumer energy prices. Both total inflation and core inflation were forecast to move up slightly next year, as the low inflation readings early this year were viewed as transitory; nevertheless, both inflation measures were forecast to continue to run somewhat below 2 percent through 2022.

The staff continued to view the uncertainty around its projections for real GDP growth, the unemployment rate, and inflation as generally similar to the average of the past 20 years. Moreover, the staff still judged that the risks to the forecast for real GDP growth were tilted to the downside, with a corresponding skew to the upside for the unemployment rate. Important factors in that assessment were that international trade tensions and foreign economic developments seemed more likely to move in directions that could have significant negative effects on the U.S. economy than to resolve more favorably than assumed. In addition, softness in business investment and manufacturing so far this year was seen as pointing to the possibility of a more substantial slowing in economic growth than the staff projected. The risks to the inflation projection were also viewed as

having a downward skew, in part because of the downside risks to the forecast for economic activity.

Participants' Views on Current Conditions and the Economic Outlook

Participants agreed that the labor market had remained strong over the intermeeting period and that economic activity had risen at a moderate rate. Job gains had been solid, on average, in recent months, and the unemployment rate had remained low. Although household spending had risen at a strong pace, business fixed investment and exports had remained weak. On a 12-month basis, overall inflation and inflation for items other than food and energy were running below 2 percent. Market-based measures of inflation compensation remained low; survey-based measures of longer-term inflation expectations were little changed.

Participants generally viewed the economic outlook as positive. Participants judged that sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective were the most likely outcomes, and they indicated that their views on these outcomes had changed little since the September meeting. Uncertainties associated with trade tensions as well as geopolitical risks had eased somewhat, though they remained elevated. In addition, inflation pressures remained muted. The risk that a global growth slowdown would further weigh on the domestic economy remained prominent.

In their discussion of the household sector, participants agreed that consumer spending was increasing at a strong pace. They also generally expected that, in the period ahead, household spending would likely remain on a firm footing, supported by strong labor market conditions, rising incomes, and favorable financial conditions. In addition, survey measures of consumer confidence remained high, and a couple of participants commented that business contacts in consumer-facing industries reported strong demand. Many participants noted that components of household spending that are thought to be particularly sensitive to interest rates had improved, including purchases of consumer durables. In addition, residential investment had turned up. Most participants who reported on spending by households in their Districts also cited favorable conditions for consumer spending, although several participants reported mixed data on spending or an increase in precautionary savings in their Districts.

In their discussions of the business sector, participants saw trade tensions and concerns about the global growth outlook as the main factors contributing to weak business investment and exports and the associated restraint on domestic economic growth. Moreover, participants generally expected that trade uncertainty and sluggish global growth would continue to damp investment spending and exports. A number of participants judged that tight labor market conditions were also causing firms to forego investment expenditures, or invest in automation systems to reduce the need for additional hiring. However, business sentiment appeared to remain strong for some industries, particularly those most closely connected with consumer goods.

Participants discussed developments in the manufacturing, energy, and agricultural sectors of the U.S. economy. Manufacturing production remained weak, and continuing concerns about global growth and trade uncertainty suggested that conditions were unlikely to improve materially over the near term. In addition, the labor strike at General Motors had disrupted motor vehicle output, and ongoing issues at Boeing were slowing manufacturing in the commercial aircraft industry. A couple of participants noted that activity was particularly weak for the energy industry, in part because of low petroleum prices. In addition, a few participants noted ongoing challenges in the agricultural sector, including those associated with lower crop yields, tariffs, weak export demand, and difficult financial positions for many farmers. One bright spot for the agricultural sector was that some commodity prices had firmed recently.

Participants judged that conditions in the labor market remained strong, with the unemployment rate near historical lows and continued solid job gains, on average. In addition, some participants commented on the strength or improvement in labor force participation nationally or in their Districts. However, the pace of increases in employment had slowed some, on net, in recent months. On the one hand, the slowing could be interpreted as a natural consequence of the economy being near full employment. On the other hand, slowing job gains might also be indicative of some cooling in labor demand, which may be consistent with an observed decline in the rate of job openings and decreases in other measures of labor market tightness. Several participants commented that the preliminary benchmark revision released in August by the Bureau of Labor Statistics had indicated that payroll employment gains would likely show less momentum coming into this year once those revisions are incorporated in published data early next year. Growth of wages had also slowed this year by some measures. Consistent with strong national data on

the labor market, business contacts in many Districts indicated continued strong labor demand, with firms still reporting difficulties finding qualified workers, or broadening their recruiting to include traditionally marginalized groups.

In their discussion of inflation developments, participants noted that readings on overall and core PCE inflation, measured on a 12-month change basis, had continued to run below the Committee's symmetric 2 percent objective. While survey-based measures of longer-term inflation expectations were generally little changed, some measures of households' inflation expectations had moved down to historically low levels. Market-based measures of inflation compensation remained low, with some longer-term measures being at or near multi-year lows. Weakness in the global economy, perceptions of downside risks to growth, and subdued global inflation pressures were cited as factors tilting inflation risk to the downside, and a few participants commented that they expected inflation to run below 2 percent for some time. Some other participants, however, saw the recent inflation data as consistent with their previous assessment that much of the weakness seen early in the year would be transitory, or that some recent monthly readings seemed broadly consistent with the Committee's longerrun inflation objective of 2 percent. A couple of participants noted that some measures of inflation could temporarily move above 2 percent early next year because of the transitory effects of tariffs.

Participants also discussed risks regarding the outlook for economic activity, which remained tilted to the downside. Some risks were seen to have eased a bit, although they remained elevated. There were some tentative signs that trade tensions were easing, the probability of a no-deal Brexit was judged to have lessened, and some other geopolitical tensions had diminished. Several participants noted that statistical models designed to gauge the probability of recession, including those based on information from the yield curve, suggested that the likelihood of a recession occurring over the medium term had fallen somewhat over the intermeeting period. However, other downside risks had not diminished. In particular, some further signs of a global slowdown in economic growth emerged; weakening in the global economy could further restrain the domestic economy, and the risk that the weakness in domestic business spending, manufacturing, and exports could give rise to slower hiring and weigh on household spending remained prominent.

Among those participants who commented on financial stability, most highlighted the risks associated with high levels of corporate indebtedness and elevated valuation pressures for a variety of risky assets. Although financial stability risks overall were seen as moderate, several participants indicated that imbalances in the corporate debt market had grown over the economic expansion and raised the concern that deteriorating credit quality could lead to sharp increases in risk spreads in corporate bond markets; these developments could amplify the effects of an adverse shock to the economy. Several participants were concerned that some banks had reduced the sizes of their capital buffers at a time when they should be rising. A few participants observed that valuations in equity and bond markets were high by historical standards and that CRE valuations were also elevated. A couple of participants indicated that market participants may be overly optimistic in the pricing of risk for corporate debt. A couple of participants judged that the monitoring of financial stability vulnerabilities should also encompass risks related to climate change.

In their consideration of the monetary policy options at this meeting, most participants believed that a reduction of 25 basis points in the target range for the federal funds rate would be appropriate. In discussing the reasons for such a decision, these participants continued to point to global developments weighing on the economic outlook, the need to provide insurance against potential downside risks to the economic outlook, and the importance of returning inflation to the Committee's symmetric 2 percent objective on a sustained basis. A couple of participants who were supportive of a rate cut at this meeting indicated that the decision to reduce the federal funds rate by 25 basis points was a close call relative to the option of leaving the federal funds rate unchanged at this meeting.

Many participants judged that an additional modest easing at this meeting was appropriate in light of persistent weakness in global growth and elevated uncertainty regarding trade developments. Nonetheless, these participants noted that incoming data had continued to suggest that the economy had proven resilient in the face of continued headwinds from global developments and that previous adjustments to monetary policy would continue to help sustain economic growth. In addition, several participants suggested that a modest easing of policy at this meeting would likely better align the target range for the federal funds rate with a variety of indicators used to assess the appropriate policy stance, including estimates of the neutral interest rate and the slope of the yield curve. A couple of participants judged that

there was more room for the labor market to improve. Accordingly, they saw further accommodation as best supporting both of the Committee's dual-mandate objectives.

Many participants continued to view the downside risks surrounding the economic outlook as elevated, further underscoring the case for a rate cut at this meeting. In particular, risks to the outlook associated with global economic growth and international trade were still seen as significant despite some encouraging geopolitical and trade-related developments over the intermeeting period. In light of these risks, a number of participants were concerned that weakness in business spending, manufacturing, and exports could spill over to labor markets and consumer spending and threaten the economic expansion. A few participants observed that the considerations favoring easing at this meeting were reinforced by the proximity of the federal funds rate to the ELB. In their view, providing adequate accommodation while still away from the ELB would best mitigate the possibility of a costly return to the ELB.

Many participants also cited the level of inflation or inflation expectations as justifying a reduction of 25 basis points in the federal funds rate at this meeting. Inflation continued to run below the Committee's symmetric 2 percent objective, and inflationary pressures remained muted. Several participants raised concerns that measures of inflation expectations remained low and could decline further without a more accommodative policy stance. A couple of these participants, pointing to experiences in Japan and the euro area, were concerned that persistent inflation shortfalls could lead to a decline in longer-run inflation expectations and less room to reduce the federal funds rate in the event of a future recession. In general, the participants who justified further easing at this meeting based on considerations related to inflation viewed this action as helping to move inflation up to the Committee's 2 percent objective on a sustained basis and to anchor inflation expectations at levels consistent with that objective.

Some participants favored maintaining the existing target range for the federal funds rate at this meeting. These participants suggested that the baseline projection for the economy remained favorable, with inflation expected to move up and stay near the Committee's 2 percent objective. They also judged that policy accommodation was already adequate and, in light of lags in the transmission of monetary policy, preferred to take some time to assess the economic effects of the Committee's previous policy actions before easing policy further.

Several participants noted that downside risks had diminished over the intermeeting period and saw little indication that weakness in business sentiment was spilling over into labor markets and consumer spending. A few participants raised the concern that a further easing of monetary policy at this meeting could encourage excessive risk-taking and exacerbate imbalances in the financial sector.

With regard to monetary policy beyond this meeting, most participants judged that the stance of policy, after a 25 basis point reduction at this meeting, would be well calibrated to support the outlook of moderate growth, a strong labor market, and inflation near the Committee's symmetric 2 percent objective and likely would remain so as long as incoming information about the economy did not result in a material reassessment of the economic outlook. However, participants noted that policy was not on a preset course and that they would be monitoring the effects of the Committee's recent policy actions, as well as other information bearing on the economic outlook, in assessing the appropriate path of the target range for the federal funds rate. A couple of participants expressed the view that the Committee should reinforce its postmeeting statement with additional communications indicating that another reduction in the federal funds rate was unlikely in the near term unless incoming information was consistent with a significant slowdown in the pace of economic activity.

Committee Policy Action

In their discussion of monetary policy for this meeting, members noted that information received since the September meeting indicated that the labor market remained strong and that economic activity had been rising at a moderate rate. Job gains had been solid, on average, in recent months, and the unemployment rate had remained low. Household spending had been rising at a strong pace. However, business fixed investment and exports remained weak, as softness in global growth and international trade developments continued to weigh on those sectors. On a 12-month basis, both the overall inflation rate and inflation for items other than food and energy were running below 2 percent. Market-based measures of inflation compensation remained low. Survey-based measures of longer-term inflation expectations were little changed.

In light of the implications of global developments for the economic outlook as well as muted inflation pressures, most members agreed to lower the target range for the federal funds rate to 1½ to 1¾ percent at this meeting. The members who supported this action viewed it as consistent with helping offset the effects on aggregate demand of weak global growth and trade developments, insuring against downside risks arising from those sources, and promoting a more rapid return of inflation to the Committee's symmetric 2 percent objective. Two members preferred to maintain the current target range for the federal funds rate at this meeting. These members indicated that the economic outlook remained positive and that they anticipated, under an unchanged policy stance, continued strong labor market conditions and solid growth in activity, with inflation gradually moving up to the Committee's 2 percent objective.

Members agreed that, in determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee would assess realized and expected economic conditions relative to its maximum-employment objective and its symmetric 2 percent inflation objective. They also agreed that those assessments would take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments.

With regard to the postmeeting statement, members agreed to update the language of the Committee's description of incoming data to acknowledge that investment spending and U.S. exports had remained weak. In describing the monetary policy outlook, they also agreed to remove the "act as appropriate" language and emphasize that the Committee would continue to monitor the implications of incoming information for the economic outlook as it assessed the appropriate path of the target range for the federal funds rate. This change was seen as consistent with the view that the current stance of monetary policy was likely to remain appropriate as long as the economy performed broadly in line with the Committee's expectations and that policy was not on a preset course and could change if developments emerged that led to a material reassessment of the economic outlook.

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, to be released at 2:00 p.m.:

"Effective October 31, 2019, 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 1½ to 1¾ percent. In light of recent and expected increases in the Federal Reserve's nonreserve liabilities, the Committee directs the Desk to purchase Treasury bills at least into the second quarter of next year to maintain over time ample reserve balances at or above the level that prevailed in early September 2019. The Committee also directs the Desk to conduct term and overnight repurchase agreement operations at least through January of next year to ensure that the supply of reserves remains ample even during periods of sharp increases in non-reserve liabilities, and to mitigate the risk of money market pressures that could adversely affect policy implementation. In addition, the Committee directs the Desk to conduct overnight reverse repurchase operations (and reverse repurchase operations with maturities of more than one day when necessary to accommodate weekend, holiday, or similar trading conventions) at an offering rate of 1.45 percent, in amounts limited only by the value of Treasury securities held outright in the System Open Market Account that are available for such operations and by a per-counterparty limit of \$30 billion per day.

The Committee directs the Desk to continue rolling over at auction all principal payments from the Federal Reserve's holdings of Treasury securities and to continue reinvesting all principal payments from the Federal Reserve's holdings of agency debt and agency mortgagebacked securities received during each calendar month. Principal payments from agency debt and agency mortgage-backed securities up to \$20 billion per month will continue to be reinvested in Treasury securities to roughly match the maturity composition of Treasury securities outstanding; principal payments in excess of \$20 billion per month will continue to be reinvested in agency mortgage-backed securities. Small deviations from these amounts for operational reasons are acceptable.

The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions."

The vote also encompassed approval of the statement below to be released at 2:00 p.m.:

"Information received since the Federal Open Market Committee met in September indicates that the labor market remains strong and that economic activity has been rising at a moderate rate. Job gains have been solid, on average, in recent months, and the unemployment rate has remained low. Although household spending has been rising at a strong pace, business fixed investment and exports remain weak. On a 12-month basis, overall inflation and inflation for items other than food and energy are running below 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. In light of the implications of global developments for the economic outlook as well as muted inflation pressures, the Committee decided to lower the target range for the federal funds rate to $1\frac{1}{2}$ to $1\frac{3}{4}$ percent. This action supports the Committee's view that sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective are the most likely outcomes, but uncertainties about this outlook remain. The Committee will continue to monitor the implications of incoming information for the economic outlook as it assesses the appropriate path of the target range for the federal funds rate.

In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its maximum employment objective and its symmetric 2 percent inflation objective. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments."

Voting for this action: Jerome H. Powell, John C. Williams, Michelle W. Bowman, Lael Brainard, James Bullard, Richard H. Clarida, Charles L. Evans, and Randal K. Quarles.

Voting against this action: Esther L. George and Eric Rosengren.

President George dissented at this meeting because she believed that an unchanged setting of monetary policy was appropriate based on incoming data and the outlook for economic activity over the medium term. Recognizing risks to the outlook from the effects of trade developments and weaker global activity, President George would be prepared to adjust policy should incoming data point to a materially weaker outlook for the economy. President Rosengren dissented because he judged that monetary policy was already accommodative and that additional accommodation was not needed for an economy in which labor markets are very tight. He judged that providing additional accommodation posed risks of further inflating the prices of risky assets and encouraging households and firms to take on too much leverage.

Consistent with the Committee's decision to lower the target range for the federal funds rate to 1½ to 1¾ percent, the Board of Governors voted unanimously to lower the interest rate paid on required and excess reserve balances to 1.55 percent and voted unanimously to approve a ¼ percentage point decrease in the primary credit rate to 2.25 percent, effective October 31, 2019.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, December 10–11, 2019. The meeting adjourned at 9:50 a.m. on October 30, 2019.

Notation Vote

By notation vote completed on October 8, 2019, the Committee unanimously approved the minutes of the Committee meeting held on September 17–18, 2019.

Videoconference meeting of October 4, 2019

The Committee met by videoconference on October 4, 2019, to review developments in money markets and to discuss steps the Committee could take to facilitate efficient and effective implementation of monetary policy.

The staff reviewed recent developments in money markets and the effect of the Desk's continued offering of overnight and term repo operations. Staff analysis and market commentary suggested that many factors contributed to the funding stresses that emerged in mid-September. In particular, financial institutions' internal risk limits and balance sheet costs may have slowed the distribution of liquidity across the system at a time when reserves had dropped sharply and Treasury issuance was elevated. Although money market conditions had since improved, market participants expressed uncertainty about how funding market conditions may evolve over coming months, especially around year-end. Further

out, the April 2020 tax season, with associated reductions in reserves around that time, was viewed as another point at which money market pressures could emerge.

The manager pro tem reviewed options that the Committee could consider to boost the level of reserves in the banking system and to address temporary money market pressures that could adversely affect monetary policy implementation. These options included a program of Treasury bill purchases coupled with overnight and term repo operations to maintain reserves at or above their early September level.

During their discussion, all FOMC participants agreed that control over the federal funds rate was a priority and that recent money market developments suggested it was appropriate to consider steps at this time to maintain a level of reserves consistent with the Committee's chosen ample-reserves regime. Given the projected decline in reserves around year-end and in the spring of 2020, they judged that it was important to reach consensus soon on a near-term plan and associated communications.

All participants expressed support for a plan to purchase Treasury bills into the second quarter of 2020 and to continue conducting overnight and term repo operations at least through January of next year. Many participants supported conducting operations to maintain reserve balances around the level that prevailed in early September. Some others suggested moving to an even higher level of reserves to provide an extra buffer and greater assurance of control over the federal funds rate. In discussing the pace of Treasury bill purchases, many participants supported a relatively rapid pace to boost reserve levels quickly, while others supported a more moderate pace of purchases. Participants generally judged that Treasury bill purchases and the associated increase in reserves would, over time, result in a gradual reduction in the need for repo operations. A few participants indicated that purchasing Treasury notes and bonds with limited remaining maturities could also be considered as a way to boost reserves, particularly if the Federal Reserve faced constraints on the pace at which it could purchase Treasury bills. Participants generally acknowledged some uncertainty over the efficient and effective level of reserves and noted it would be prudent to continue to monitor money market developments and stand ready to adjust the plan as necessary. Overall, participants agreed that the pace of purchases as well as the parameters of the repo operations were technical details of monetary policy implementation not intended to affect the stance of monetary policy and should be communicated as such.

Most participants preferred not to wait until the October 29-30 FOMC meeting to issue a public statement regarding the planned Treasury bill purchases and repo operations. They noted that releasing a statement before the October 29-30 FOMC meeting would help reinforce the point that these actions were technical and not intended to affect the stance of policy. In addition, a few participants remarked that an earlier release would allow the Desk to begin boosting the level of reserves sooner. A couple of participants, however, wanted to wait until the October 29-30 FOMC meeting to announce the plan so as not to surprise market participants or lead them to infer that the Committee regarded the situation as dire and thus requiring immediate action. The Chair proposed having the staff produce a draft statement that the Committee could comment on early in the following week. Formal approval could occur by notation vote with an anticipated release of a statement to the public on October 11, 2019.

Participants discussed longer-term issues that the Committee might want to study once the near-term plan was in place. In particular, many participants mentioned that the Committee may want to continue its previous discussion of a standing repo facility as a part of the longrun implementation framework. Almost all of these participants noted that such a facility was an option to provide a backstop to buffer shocks that could adversely affect policy implementation, and several of these participants mentioned the potential for the facility to support banks' liquidity risk management while reducing the demand for reserves. Other participants, instead, highlighted that policy implementation had worked well with larger quantities of reserves and focused their discussion on actions to firmly establish an ample supply of reserves over the longer run. A number of participants noted that a discussion of a broader range of factors that affect the level and volatility of reserves may be appropriate at a future meeting.

On October 11, 2019, the Committee approved by notation vote the following statement that outlines steps to ensure that the supply of reserves remains ample so that control over the level of the federal funds rate and other short-term interest rates is exercised primarily through the setting of the Federal Reserve's administered rates, and in which active management of the supply of reserves is not required.

STATEMENT REGARDING MONETARY POLICY IMPLEMENTATION

(Adopted October 11, 2019)

Consistent with its January 2019 Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization, the Committee reaffirms its intention to implement monetary policy in a regime in which an ample supply of reserves ensures that control over the level of the federal funds rate and other short-term interest rates is exercised primarily through the setting of the Federal Reserve's administered rates, and in which active management of the supply of reserves is not required. To ensure that the supply of reserves remains ample, the Committee approved by notation vote completed on October 11, 2019, the following steps:

- In light of recent and expected increases in the Federal Reserve's non-reserve liabilities, the Federal Reserve will purchase Treasury bills at least into the second quarter of next year in order to maintain over time ample reserve balances at or above the level that prevailed in early September 2019.
- In addition, the Federal Reserve will conduct term and overnight repurchase agreement operations at least through January of next year to ensure that the supply of reserves remains ample even during periods of sharp increases in non-reserve liabilities, and to mitigate the risk of money market pressures that could adversely affect policy implementation.

These actions are purely technical measures to support the effective implementation of the FOMC's monetary policy, and do not represent a change in the stance of monetary policy. The Committee will continue to monitor money market developments as it assesses the level of reserves most consistent with efficient and effective policy implementation. The Committee stands ready to adjust the details of these plans as necessary to foster efficient and effective implementation of monetary policy.

In connection with these plans, the Federal Open Market Committee voted unanimously to authorize and 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:

"Effective October 15, 2019, 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 1-3/4 to 2 percent. In light of recent and expected increases in the Federal Reserve's non-

reserve liabilities, the Committee directs the Desk to purchase Treasury bills at least into the second quarter of next year to maintain over time ample reserve balances at or above the level that prevailed in early September 2019. The Committee also directs the Desk to conduct term and overnight repurchase agreement operations at least through January of next year to ensure that the supply of reserves remains ample even during periods of sharp increases in non-reserve liabilities, and to mitigate the risk of money market pressures that could adversely affect policy implementation. In addition, the Committee directs the Desk to conduct overnight reverse repurchase operations (and reverse repurchase operations with maturities of more than one day when necessary to accommodate weekend, holiday, or similar trading conventions) at an offering rate of 1.70 percent, in amounts limited only by the value of Treasury securities held outright in the System Open Market Account that are available for such operations and by a per-counterparty limit of \$30 billion per day.

The Committee directs the Desk to continue rolling over at auction all principal payments from the Federal Reserve's holdings of Treasury securities and to continue reinvesting all principal payments from the Federal Reserve's holdings of agency debt and agency mortgagebacked securities received during each calendar month. Principal payments from agency debt and agency mortgage-backed securities up to \$20 billion per month will continue to be reinvested in Treasury securities to roughly match the maturity composition of Treasury securities outstanding; principal payments in excess of \$20 billion per month will continue to be reinvested in agency mortgage-backed securities. Small deviations from these amounts for operational reasons are acceptable.

The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions."

> James A. Clouse Secretary