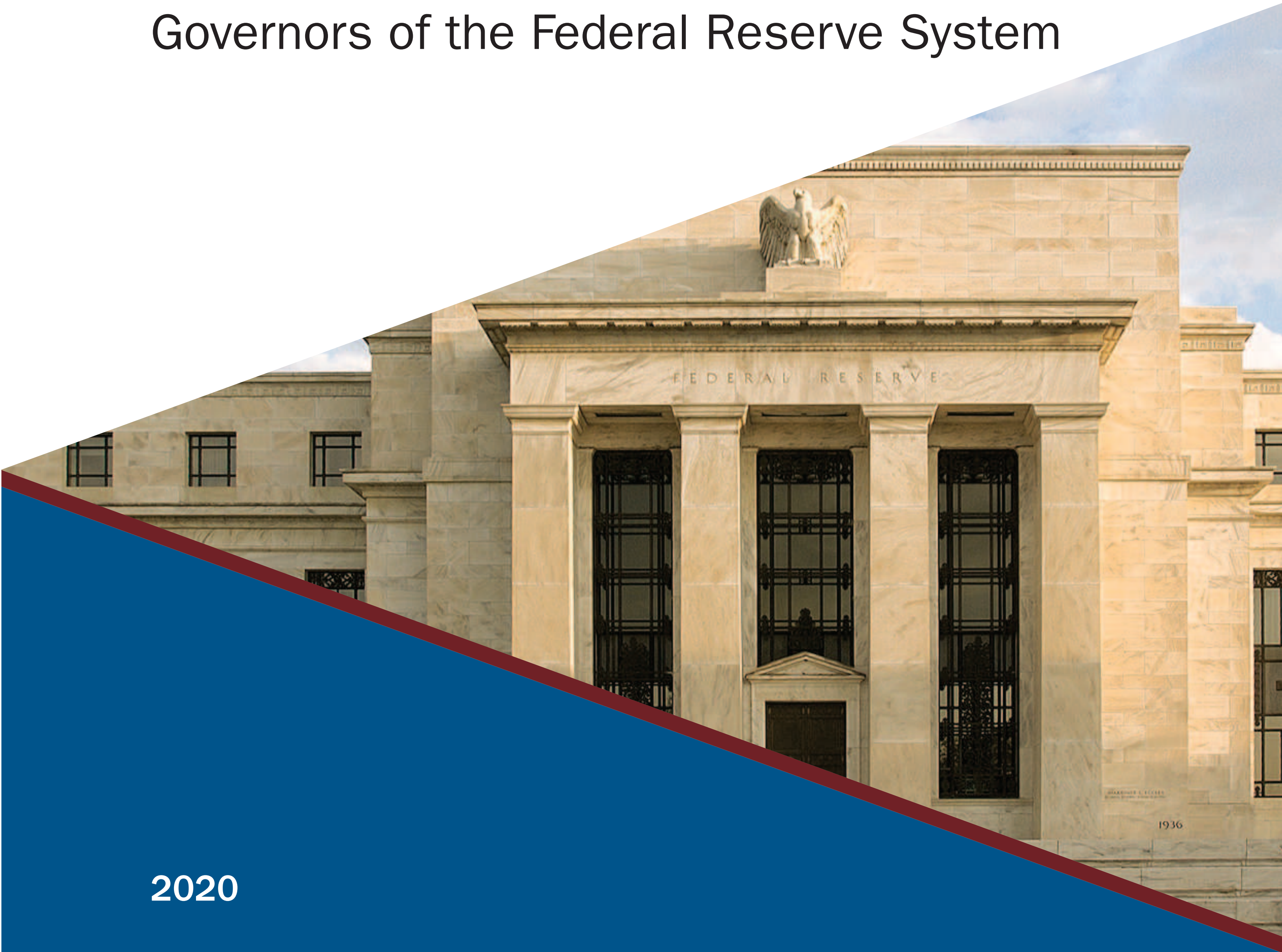
REPORT TO CONGRESS

107th
Annual Report of the Board of Governors of the Federal Reserve System



2020

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

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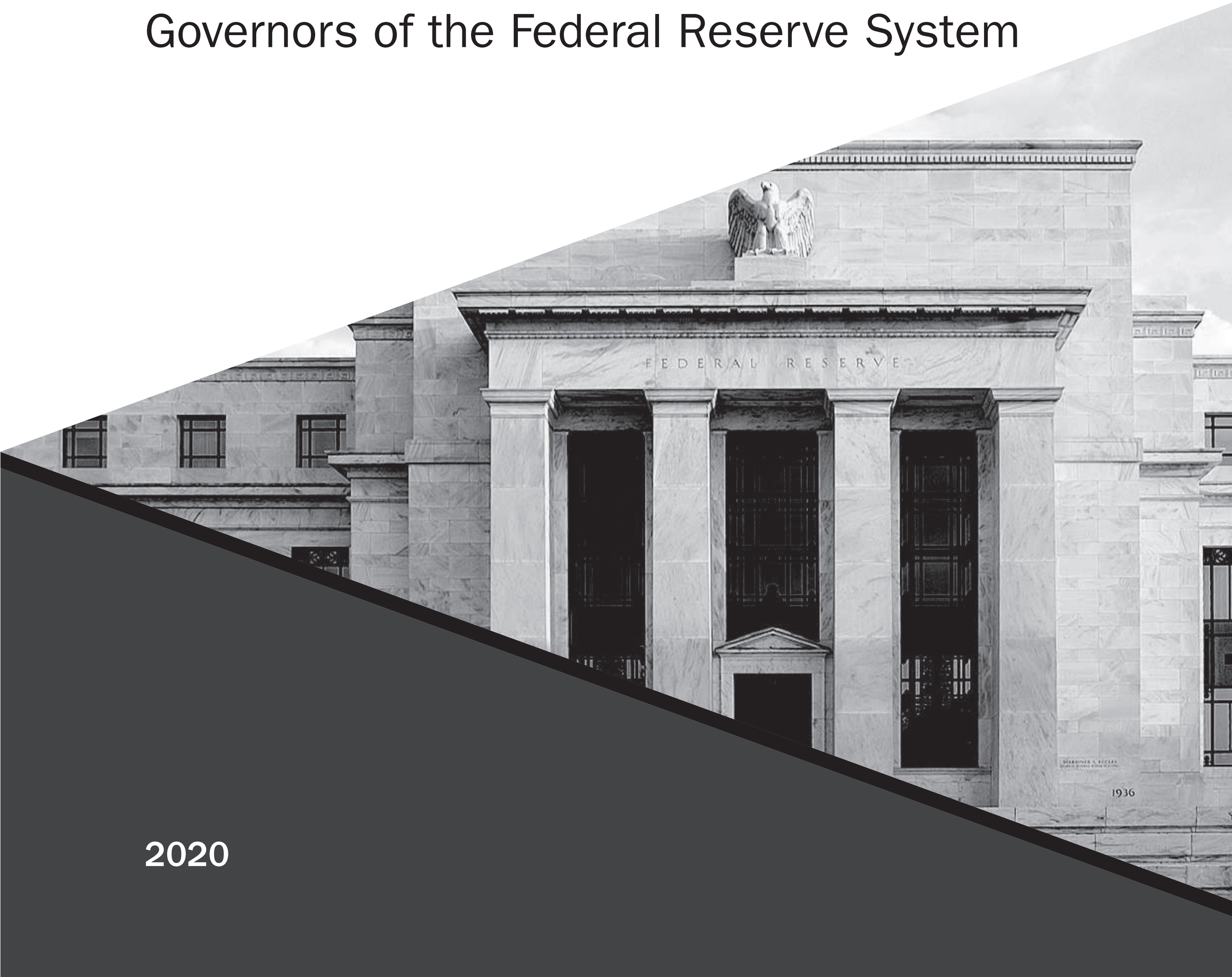


2020

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Contents

About the Federal Reserve

The Federal Reserve was created by an act of Congress on December 23, 1913, to provide the nation with a safer, more flexible, and more stable monetary and financial system. In establishing the Federal Reserve System, the United States was divided geographically into 12 Districts, each with a separately incorporated Reserve Bank.

For more information about the Federal Reserve Board and the Federal Reserve System, visit the Board's website at https://www.federalreserve.gov/aboutthefed/default.htm. Online versions of the Board's annual report are available at https://www.federalreserve.gov/publications/annual-report/default.htm.

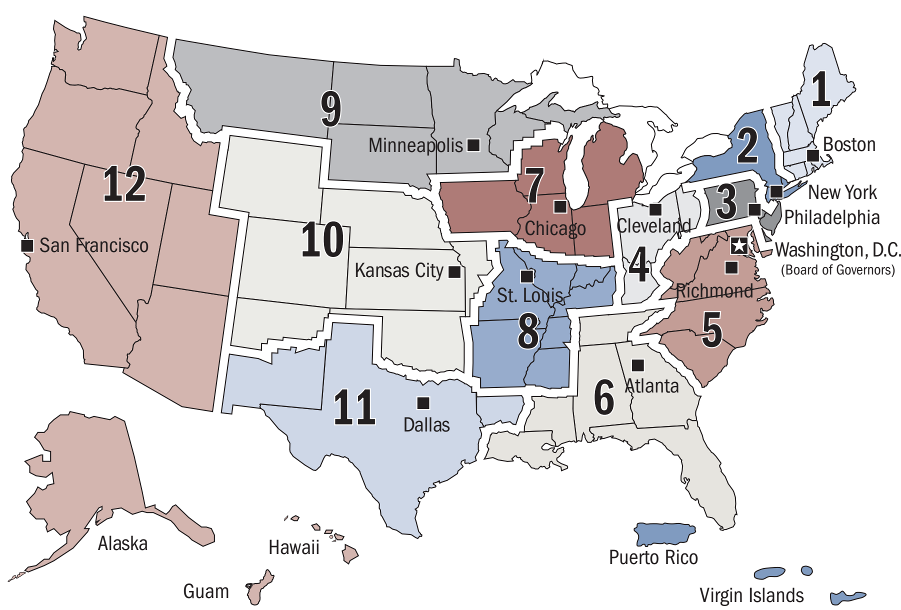
1 | Overview

This report covers the calendar-year 2020 operations and activities of the Federal Reserve, the central bank of the United States (see figure 1.1), categorized in the five key functional areas:

- **Conducting monetary policy and monitoring economic developments.** Section 2 provides adapted versions of the Board's semiannual Monetary Policy Reports to Congress.
- **Promoting financial system stability.** Section 3 reviews Board and System activities and research undertaken to foster a resilient and stable financial system.
- **Supervising and regulating financial institutions and their activities.** Section 4 summarizes the Board's efforts related to financial institution oversight and examinations, supervisory policymaking, and regulatory activities and enforcement.
- **Fostering payment and settlement system safety and efficiency.** Section 5 describes actions by the Board and Reserve Banks to promote the effectiveness of the nation's payment systems, discusses initiatives to promote payment system safety, and provides data on Reserve Bank services and income.
- **Promoting consumer protection and community development.** Section 6 provides information on the Board's efforts to promote a fair and transparent financial services market for consumers, protect consumer rights, and ensure that Board policies and research take consumer and community perspectives into account.

Figure 1.1. The Federal Reserve System's unique structure ensures broad perspective

The Federal Reserve System consists of 12 Reserve Banks located in major cities throughout the United States, along with a seven-member Board of Governors headquartered in Washington, D.C. See "Federal Reserve System Organization" in appendix A for more information on the Board and System leadership.



Additional information for calendar-year 2020 on Federal Reserve leadership, policy actions, budgets as well as historical data and supporting activities can be found in the appendixes:

- Appendix A lists key officials across the Federal Reserve System
- Appendix B provides links to the minutes for each of the eight regularly scheduled meetings of the Federal Open Market Committee
- Appendix C contains information on the Federal Reserve's audited financial statements as well as reviews conducted by the Office of Inspector General and the Government Accountability Office
- Appendix D presents information on the budgets for the Board and Reserve Banks and on currency-related costs
- Appendix E summarizes policy actions of the Board of Governors
- Appendix F lists litigation, both pending and resolved, that the Board of Governors was a party in
- Appendix G includes statistical tables that provide updated historical data concerning Board and System operations and activities

2 | Monetary Policy and Economic Developments

The Federal Reserve conducts the nation's monetary policy to promote maximum employment, stable prices, and moderate long-term interest rates in the U.S. economy. This section reviews U.S. monetary policy and economic developments in 2020, with excerpts and select figures from the *Monetary Policy Report* published in February 2021 and June 2020.[1] The report, submitted semiannually to the Congress, is delivered concurrently with testimony from the Federal Reserve Board Chair.[2]

February 2021 Summary

The COVID-19 pandemic continues to weigh heavily on economic activity and labor markets in the United States and around the world, even as the ongoing vaccination campaigns offer hope for a return to more normal conditions later this year. While unprecedented fiscal and monetary stimulus and a relaxation of rigorous social-distancing restrictions supported a rapid rebound in the U.S. labor market last summer, the pace of gains has slowed and employment remains well below pre-pandemic levels. In addition, weak aggregate demand and low oil prices have held down consumer price inflation. In this challenging environment, the Federal Open Market Committee (FOMC) has held its policy rate near zero and has continued to purchase Treasury securities and agency mortgage-backed securities to support the economic recovery. These measures, along with the Committee's strong guidance on interest rates and the balance sheet, will ensure that monetary policy will continue to deliver powerful support to the economy until the recovery is complete.

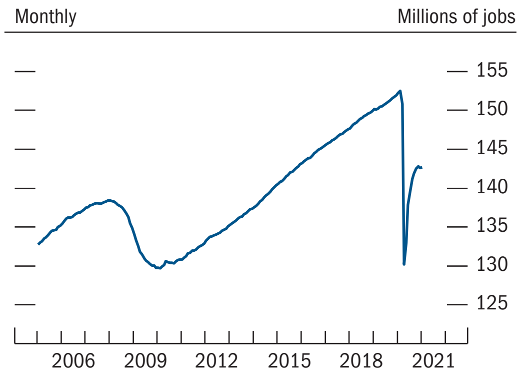
Economic and Financial Developments

Economic activity and the labor market. The initial wave of COVID-19 infections led to a historic contraction in economic activity as a result of both mandatory restrictions and voluntary changes in behavior by households and businesses. The level of gross domestic product (GDP) fell a cumulative 10 percent over the first half of 2020, and the measured unemployment rate spiked to a post–World War II high of 14.8 percent in April. As mandatory restrictions were subsequently relaxed and households and firms adapted to pandemic conditions, many sectors of the economy recovered rapidly and unemployment fell back. Momentum slowed substantially in the late fall and

[1] Those complete reports are available on the Board's website at https://www.federalreserve.gov/monetarypolicy/files/20210219_mprfullreport.pdf (February 2021) and https://www.federalreserve.gov/monetarypolicy/files/20200612_mprfullreport.pdf (June 2020).

[2] As required by section 2B of the Federal Reserve Act, the Federal Reserve Board submits written reports to the Congress that contain discussions of "the conduct of monetary policy and economic developments and prospects for the future."

Figure 2.1. Nonfarm payroll employment

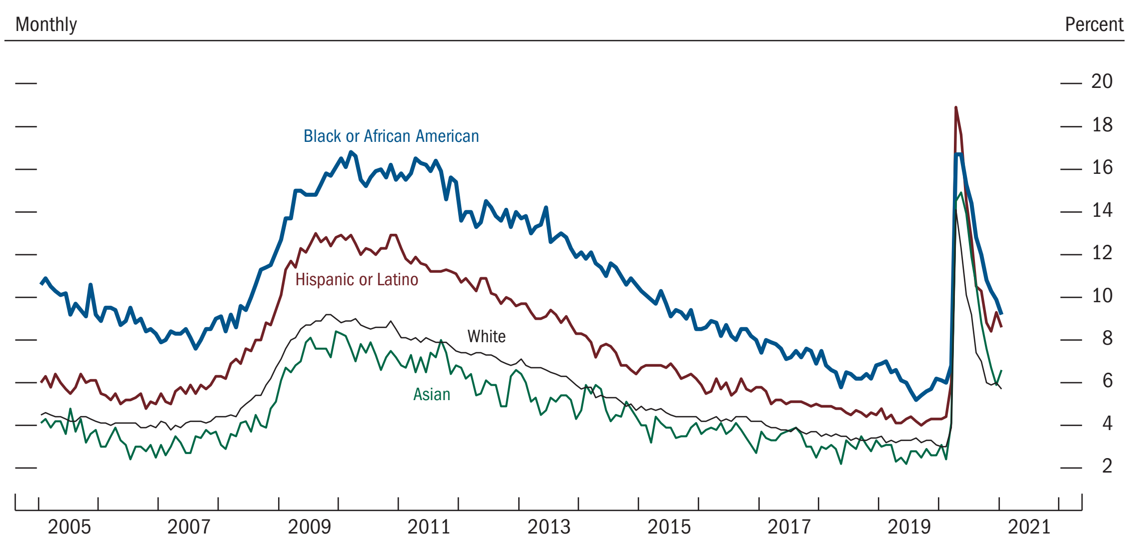


Source: Bureau of Labor Statistics via Haver Analytics.

early winter, however, as spending on many services contracted again amid a worsening of the pandemic. All told, GDP is currently estimated to have declined 2.5 percent over the four quarters of last year and payroll employment in January was almost 10 million jobs below pre-pandemic levels, while the unemployment rate remained elevated at 6.3 percent and the labor force participation rate was severely depressed (figure 2.1). Job losses have been most severe and unemployment remains particularly elevated among Hispanics, African Americans, and other minority groups as well as those who hold lower-wage jobs (figure 2.2).

Inflation. After declining sharply as the pandemic struck, consumer price inflation rebounded along with economic activity, but inflation remains below pre-COVID levels and the FOMC's longer-run objective of 2 percent. The 12-month measure of personal consumption expenditures inflation was

Figure 2.2. Unemployment rate, by race and ethnicity

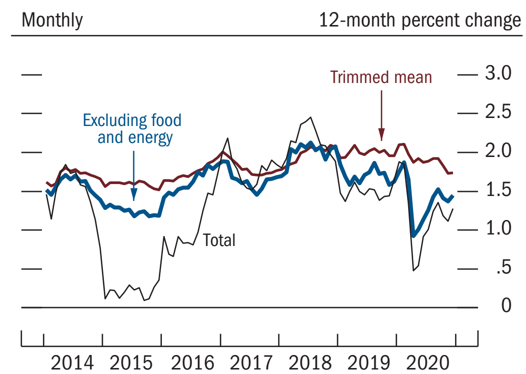


Note: Unemployment rate measures total unemployed as a percentage of the labor force. Persons whose ethnicity is identified as Hispanic or Latino may be of any race. Small sample sizes preclude reliable estimates for Native Americans and other groups for which monthly data are not reported by the Bureau of Labor Statistics.

Source: Bureau of Labor Statistics via Haver Analytics.

1.3 percent in December, while the measure that excludes food and energy items—so-called core inflation, which is typically less volatile than total inflation—was 1.5 percent (figure 2.3). Both total and core inflation were held down in part by prices for services adversely affected by the pandemic, and indicators of longer-run inflation expectations are now at similar levels to those seen in recent years.

Figure 2.3. Change in the price index for personal consumption expenditures



Note: The data extend through December 2020.

Source: For trimmed mean, Federal Reserve Bank of Dallas; for all else, Bureau of Economic Analysis; all via Haver Analytics.

Financial conditions. Financial conditions have improved notably since the spring of last year and remain generally accommodative. Low interest rates, the Federal Reserve's asset purchases, the establishment of emergency lending facilities, and other extraordinary actions, together with fiscal policy, continued to support the flow of credit in the economy and smooth market functioning. The nominal Treasury yield curve steepened and equity prices continued to increase steadily in the second half of last year as concerns over the resurgence in COVID-19 cases appeared to have been outweighed by positive news about vaccine prospects and expectations of further fiscal support. Spreads of yields on corporate bonds over those on comparable-maturity Treasury securities narrowed significantly, partly because the credit quality of firms improved and market functioning remained stable. Mortgage rates for households remain near historical lows. However, financing conditions remain relatively tight for households with low credit scores and for small businesses.

Financial stability. While some financial vulnerabilities have increased since the start of the pandemic, the institutions at the core of the financial system remain resilient. Asset valuation pressures have returned to or exceeded pre-pandemic levels in most markets, including in equity, corporate bond, and residential real estate markets. Although government programs have supported business and household incomes, some businesses and households have become more vulnerable to shocks, as earnings have fallen and borrowing has risen. Strong capital positions before the pandemic helped banks absorb large losses related to the pandemic. Financial institutions, however, may experience additional losses as a result of rising defaults in the coming years, and long-standing vulnerabilities at money market mutual funds and open-end investment funds remain unaddressed. Although some facilities established by the Federal Reserve in the wake of the pandemic have expired, those remaining continue to serve as important backstops against further stress. (See the box "Developments Related to Financial Stability" on pages 30–31 of the February 2021 *Monetary Policy Report*.)

International developments. Mirroring the United States, economic activity abroad bounced back last summer after the spread of the virus moderated and restrictions eased. Subsequent infections and renewed restrictions have again depressed economic activity, however. Relative to the spring, the current slowdown in economic activity has been less dramatic. Fiscal and monetary policies continue to be supportive, and people have adapted to containment measures that have often been less stringent than earlier.

Despite the resurgence of the pandemic in many economies, financial markets abroad have recovered since the spring, buoyed by continued strong fiscal and monetary policy support and the start of vaccination campaigns in many countries. With the abatement of financial stress, the broad dollar has depreciated, more than reversing its appreciation at the onset of the pandemic. On balance, global equity prices have recovered and sovereign credit spreads in emerging market economies and in the European periphery have narrowed. In major advanced economies, sovereign yields remained near historical low levels amid continued monetary policy accommodation.

Monetary Policy

Review of the strategic framework for monetary policy. The Federal Reserve concluded the review of its strategic framework for monetary policy in the second half of 2020. The review was motivated by changes in the U.S. economy that affect monetary policy, including the global decline in the general level of interest rates and the reduced sensitivity of inflation to labor market tightness. In August, the FOMC issued a revised Statement on Longer-Run Goals and Monetary Policy Strategy.[3] The revised statement acknowledges the changes in the economy over recent decades and articulates how policymakers are taking these changes into account in conducting monetary policy. In the revised statement, the Committee indicates that it aims to attain its statutory goals by seeking to eliminate shortfalls from maximum employment—a broad-based and inclusive goal—and achieve inflation that averages 2 percent over time. Achieving inflation that averages 2 percent over time helps ensure that longer-term inflation expectations remain well anchored at the FOMC's longer-run 2 percent objective. Hence, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time. (See the box "The FOMC's Revised Statement on Longer-Run Goals and Monetary Policy Strategy" on pages 40–41 of the February 2021 *Monetary Policy Report*.)

In addition, in December the FOMC introduced two changes to the Summary of Economic Projections (SEP) intended to enhance the information provided to the public. First, the release of the

[3] The statement, revised in August 2020, was unanimously reaffirmed at the FOMC's January 2021 meeting.

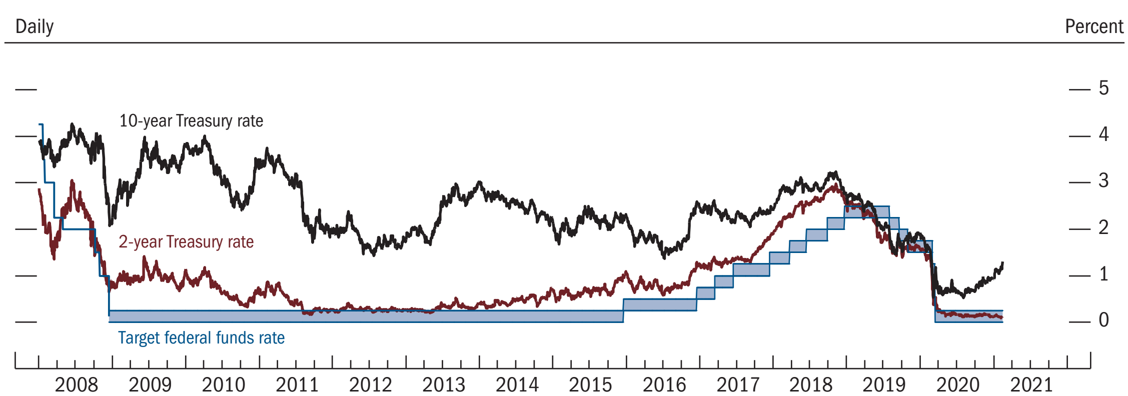
full set of SEP exhibits was accelerated by three weeks, from the publication of the minutes three weeks after the end of an FOMC meeting to the day of the policy decision, the second day of an FOMC meeting. Second, new charts were included that display how FOMC participants' assessments of uncertainties and risks have evolved over time.

Interest rate policy. In light of the effects of the continuing public health crisis on the economy and the associated risks to the outlook, the FOMC has maintained the target range for the federal funds rate at 0 to ¼ percent since last March (figure 2.4). In pursuing the strategy outlined in its revised statement, the Committee noted that it 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.

Balance sheet policy. With the federal funds rate near zero, the Federal Reserve has also continued to undertake asset purchases to increase its holdings of Treasury securities by $80 billion per month and its holdings of agency mortgage-backed securities by $40 billion per month. These purchases help foster smooth market functioning and accommodative financial conditions, thereby supporting the flow of credit to households and businesses. The Committee expects these purchases to continue at least at this pace until substantial further progress has been made toward its maximum-employment and price-stability goals.

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 is prepared to

Figure 2.4. Selected interest rates



Note: The 2-year and 10-year Treasury rates are the constant-maturity yields based on the most actively traded securities.

Source: Department of the Treasury; Federal Reserve Board.

adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals.

Special Topics

Disparities in job loss. The COVID-19 crisis has exacerbated pre-existing disparities in labor market outcomes across job types and demographic groups. Job losses last spring were disproportionately severe among lower-wage workers, less-educated workers, and racial and ethnic minorities, as in previous recessions, but also among women, in contrast to previous recessions. While all groups have experienced at least a partial recovery in employment rates since April 2020, the shortfall in employment remains especially large for lower-wage workers and for Hispanics, African Americans, and other minority groups, and the additional childcare burdens resulting from school closures have weighed more heavily on women's labor force participation than on men's labor force participation. (See the box "Disparities in Job Loss during the Pandemic" on pages 12–14 of the February 2021 *Monetary Policy Report*.)

High-frequency indicators. The unprecedented magnitude, speed, and nature of the COVID-19 shock to the economy rendered traditional statistics insufficient for monitoring economic activity in a timely manner. As a result, policymakers turned to nontraditional high-frequency indicators of activity, especially for the labor market and consumer spending. These indicators presented a more timely and granular picture of the drop and subsequent rebound in economic activity last spring. The most recent readings obtained from those indicators suggest that economic activity began to edge up again in January, likely reflecting in part the disbursement of additional stimulus payments to households. (See the box "Monitoring Economic Activity with Nontraditional High-Frequency Indicators" on pages 7–9 of the February 2021 *Monetary Policy Report*.)

Monetary policy rules. Simple monetary policy rules, which relate a policy interest rate to a small number of other economic variables, can provide useful guidance to policymakers. This discussion presents the policy rate prescriptions from a number of rules that have received attention in the research literature, many of which mechanically prescribe raising the federal funds rate as employment rises above estimates of its longer-run level. A rule that instead responds only to shortfalls of employment from assessments of its maximum level is featured to illustrate one aspect of the FOMC's revised approach to policy, as described in the revised Statement on Longer-Run Goals and Monetary Policy Strategy. (See the box "Monetary Policy Rules and Shortfalls from Maximum Employment" on pages 45–48 of the February 2021 *Monetary Policy Report*.)

June 2020 Summary

The COVID-19 outbreak is causing tremendous human and economic hardship across the United States and around the world. The virus and the measures taken to protect public health have induced a sharp decline in economic activity and a surge in job losses, with the unemployment rate, which had been at a 50-year low, soaring to a postwar record high. Weaker demand and significantly lower oil prices are holding down consumer price inflation. The disruptions to economic activity here and abroad significantly affected financial conditions and impaired the flow of credit to U.S. households and businesses. In response to these developments, the Federal Reserve quickly lowered its policy rate to close to zero to support economic activity and took extraordinary measures to stabilize markets and bolster the flow of credit to households, businesses, and communities. Financial conditions have improved, in part reflecting policy measures to support the economy and the flow of credit. 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.

Economic and Financial Developments

Economic activity. In response to the public health emergency precipitated by the spread of COVID-19, many protective measures were adopted to limit the transmission of the virus. These social-distancing measures effectively closed parts of the economy, resulting in a sudden and unprecedented fall in economic activity and historic increases in joblessness. Although virus mitigation efforts in many places did not begin until the final two weeks of March, real personal consumption expenditures (PCE) plummeted 6.7 percent in March and an unprecedented 13.2 percent in April. Indicators suggest spending rose in May, but the April data and May indicators taken together point to a collapse in second-quarter real PCE. Likewise, in the housing market, residential sales and construction in April posted outsized declines that are close to some of the largest ever recorded, and heightened uncertainty and weak demand have led many businesses to put investment plans on hold or cancel them outright. These data, along with other information, suggest that real gross domestic product will contract at a rapid pace in the second quarter after tumbling at an annual rate of 5 percent in the first quarter of 2020.

The labor market. The severe economic repercussions of the pandemic have been especially visible in the labor market. Since February, employers have shed nearly 20 million jobs from payrolls, reversing almost 10 years of job gains. The unemployment rate jumped from a 50-year low of 3.5 percent in February to a post–World War II high of 14.7 percent in April and then moved down to a still very elevated 13.3 percent in May. The most severe job losses have been sustained by those with lower earnings and by the socioeconomic groups that are disproportionately represented among low-wage jobs.

Inflation. Consumer price inflation has slowed abruptly. The 12-month change in the price index for PCE was just 0.5 percent in April. The 12-month measure of PCE inflation that excludes food and energy items (so-called core inflation), which historically has been a better indicator of where overall inflation will be in the future than the total figure, fell from 1.8 percent in February to

1.0 percent in April. This slowing reflected monthly readings for March and April that were especially low because of large price declines in some categories most directly affected by social distancing. Overall inflation also has been held down by substantially lower energy prices, which more than offset the effects of surging prices for food. Despite the sharp slowing in inflation, survey-based measures of longer-run inflation expectations have generally been stable at relatively low levels. However, market-based measures of inflation compensation have moved down to some of the lowest readings ever seen.

Financial conditions. In late February and over much of March as COVID-19 spread, equity prices plunged and nominal Treasury yields dropped substantially, with yields on longer-term securities reaching all-time record lows. Spreads of yields on corporate bonds over those on comparable-maturity Treasury securities widened significantly as the credit quality of firms declined and market functioning deteriorated; in addition, loans were unavailable for most firms, particularly firms below investment grade. At the most acute phase of this period, trading conditions became extremely illiquid and some critical markets stopped functioning properly. Consumer borrowing also fell as spending slumped. Several markets supporting consumer lending experienced severe strains around this period, including the agency residential mortgage-backed securities (MBS) market as well as the auto, credit card, and student loan securitization markets. In response, the Federal Reserve took unprecedented measures to restore smooth market functioning and to support the flow of credit in the economy, including the creation of a number of emergency credit and liquidity facilities.[4] These actions, along with the aggressive response of fiscal policy, stabilized financial markets and led to a notable improvement in financial conditions for both firms and households as well as state and local governments. Even so, lending standards for both households and businesses have become less accommodative, and borrowing conditions are tight for low-rated households and businesses.

Financial stability. The COVID-19 pandemic has abruptly halted large swaths of economic activity and led to swift financial repercussions. Despite increased resilience from the financial and regulatory reforms adopted since 2008, financial system vulnerabilities—most notably those associated with liquidity and maturity transformation in the nonbank financial sector—have amplified some of the economic effects of the pandemic. Accordingly, financial-sector vulnerabilities are expected to be significant in the near term. The strains on household and business balance sheets from the economic and financial shocks since March will likely create persistent fragilities. Financial institutions may experience strains as a result. The Federal Reserve, with approval of the Secretary of the Treasury, established new credit and liquidity facilities under section 13(3) of the Federal Reserve Act to alleviate severe dislocations that arose in a number of financial markets and to support the flow of credit to households, businesses, and state and local governments. Fur-

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4 A list of funding, credit, liquidity, and loan facilities established by the Federal Reserve in response to COVID-19 is available on the Board's website at https://www.federalreserve.gov/funding-credit-liquidity-and-loan-facilities.htm.

thermore, as financial stresses abroad risked spilling over into U.S. credit markets, the Federal Reserve and several other central banks announced the expansion and enhancement of dollar liquidity swap lines. In addition, the Federal Reserve introduced a new temporary repurchase agreement facility for foreign monetary authorities. The Federal Reserve has also made a number of adjustments to its regulatory and supervisory regime to facilitate market functioning and reduce regulatory impediments to banks supporting households, businesses, and municipal customers affected by COVID-19. (See the box "Developments Related to Financial Stability" on pages 30–33 of the June 2020 *Monetary Policy Report*.)

International developments. The spread of COVID-19 throughout the world and the measures taken to contain it have produced devastating effects on the global economy. Amid widespread and stringent shutdowns, recent data suggest that global economic activity in the first half of the year has experienced a sharp and synchronized contraction greater than that in the Global Financial Crisis. The many mandated closures of nonessential businesses abroad and the collapse in consumer demand contributed to a significant deterioration in labor markets and subdued inflation. Unlike past recessions, services activity in the foreign economies has dropped more sharply than manufacturing, with restrictions on movement having severely curtailed spending on travel, tourism, restaurants, and recreation. Against this backdrop, foreign governments and central banks have responded strongly and swiftly to support incomes and to improve market liquidity and the provision of credit. More recently, economic activity has begun to revive in some foreign economies as authorities eased social-distancing restraints.

The rapid spread of COVID-19 weighed heavily on global risk sentiment, with financial stresses intensifying and liquidity conditions deteriorating in many foreign financial markets. Aggressive fiscal and monetary policy responses in the United States and abroad, however, helped boost sentiment and improve market functioning. On balance, financial conditions abroad remain tighter than at the beginning of the year, especially in some emerging market economies. Since February, global equity prices moved lower, sovereign interest rates in the European periphery increased somewhat, and measures of sovereign spreads in emerging market economies widened significantly. In many advanced economies, long-term interest rates reached historically low levels.

Monetary Policy

Easing monetary policy. In light of the effects of COVID-19 on economic activity and on risks to the outlook, the Federal Open Market Committee (FOMC) rapidly lowered the target range for the federal funds rate. Specifically, at two meetings in March, the FOMC lowered the target range for the federal funds rate by a total of 1½ percentage points, bringing it to the current range of 0 to ¼ percent. The Committee expects to maintain this target range until it is confident that the economy has weathered recent events and is on track to achieve its maximum-employment and price-stability goals. The Committee noted that it would continue to monitor the implications of incoming information for the economic outlook, including information related to public health, as well as global developments and muted inflation pressures, and that it would use its tools and act as appropriate to support the economy.

Safeguarding market functioning. Market functioning deteriorated in many markets in late February and much of March, including the critical Treasury and agency MBS markets. The Federal Reserve swiftly took a series of policy actions to address these developments. The FOMC announced it would purchase Treasury securities and agency MBS in the amounts needed to ensure smooth market functioning and the effective transmission of monetary policy to broader financial conditions. The Open Market Desk began offering large-scale overnight and term repurchase agreement operations. The Federal Reserve coordinated with other central banks to enhance the provision of liquidity via the standing U.S. dollar liquidity swap line arrangements and announced the establishment of temporary U.S. dollar liquidity arrangements (swap lines) with additional central banks. The Federal Reserve also established a temporary repurchase agreement facility for foreign and international monetary authorities. (Separately, the Board introduced several facilities with the backing of the U.S. Treasury to more directly support the flow of credit to the economy.) Since these policy actions were announced, the functioning of Treasury and MBS markets has gradually improved. (See the box “Federal Reserve Actions to Ensure Smooth Functioning of Treasury and MBS Markets” on pages 45–47 of the June 2020 *Monetary Policy Report*.) Reflecting these policy responses, the size of the Federal Reserve’s balance sheet increased significantly. (See the box “Developments on the Federal Reserve’s Balance Sheet” on pages 50–52 of the June 2020 *Monetary Policy Report*.)

Fed Listens. The Federal Reserve has released a report on its *Fed Listens* initiative. This initiative is part of a broad review of the monetary policy strategy, tools, and communication practices the Federal Reserve uses to pursue its statutory dual-mandate goals of maximum employment and price stability. A key component of the review was a series of public *Fed Listens* events aimed at consulting with a broad range of stakeholders in the U.S. economy on issues pertaining to the dual-mandate objectives.

Special Topics

Disparities in job loss during the pandemic. The deterioration in labor market conditions since February has been sudden, severe, and widespread. At the same time, workers in some industries, occupations, demographic groups, and locations have experienced more significant employment declines than others. Although disparities in labor market outcomes often arise during recessions, factors unique to this episode have also contributed to the recent divergence. Job losses have been especially severe for those with lower earnings and for the socioeconomic groups that are disproportionately represented among low-wage jobs. (See the box “Disparities in Job Loss during the Pandemic” on pages 8–9 of the June 2020 *Monetary Policy Report*.)

Small businesses during the COVID-19 crisis. Small businesses make up nearly half of U.S. private-sector employment and play key roles in local communities. The pandemic poses acute risks to the survival of many small businesses. Their widespread failure would adversely alter the economic landscape of local communities and potentially slow the economic recovery and future labor productivity growth. The Congress, the Federal Reserve, and other federal agencies are making aggressive efforts to support small businesses. (See the box "Small Businesses during the COVID-19 Crisis" on pages 24–26 of the June 2020 *Monetary Policy Report*.)

Federal fiscal policy response to COVID-19. While the economic consequences resulting from the pandemic have been historically large, the amount of fiscal support that has been enacted constitutes the fastest and largest fiscal response to any postwar economic downturn. The pieces of legislation enacted since the arrival of the pandemic that have composed this response are expected to raise government outlays and reduce tax revenues by nearly $2 trillion in the current fiscal year. (See the box "Federal Fiscal Policy Response to COVID-19" on pages 20–21 of the June 2020 *Monetary Policy Report*.)

Policy response to COVID-19 in foreign economies. Authorities in many foreign economies have implemented fiscal, monetary, and regulatory measures to mitigate disruptions caused by the COVID-19 pandemic. Sizable fiscal packages targeted the sudden loss of income by firms and households. Actions by central banks, including purchases of sovereign and private bonds, have aimed to restore market functioning, sustain the provision of credit to businesses and households during the pandemic, and support the economic recovery. Regulatory changes have focused on ensuring that banks sustain their capacity to absorb pandemic-related losses while continuing to lend to households and firms. (See the box "Policy Response to COVID-19 in Foreign Economies" on pages 38–39 of the June 2020 *Monetary Policy Report*.)

3 | Financial Stability

The Federal Reserve monitors financial system risks and engages at home and abroad to help ensure the system supports a healthy economy for U.S. households, communities, and businesses.

In pursuit of continued financial stability, the Federal Reserve monitors the potential buildup of risks to financial stability; uses such analyses to inform Federal Reserve responses, including the design of stress-test scenarios and decisions regarding other policy tools such as the countercyclical capital buffer; works with other domestic agencies directly and through the Financial Stability Oversight Council (FSOC); and engages with the global community in monitoring, supervision, and regulation that mitigate the risks and consequences of financial instability domestically and abroad.[1]

This section discusses key financial stability activities undertaken by the Federal Reserve over 2020, which include the following:

- monitoring risks to financial stability
- establishing lending facilities to support the economy during the COVID-19 crisis
- promoting a perspective on the supervision and regulation of large, complex financial institutions that accounts for the potential spillovers from distress at such institutions to the financial system and broader economy
- engaging in domestic and international cooperation and coordination

Monitoring Risks to Financial Stability

Financial institutions are linked together through a complex set of relationships, and their condition depends on the economic condition of the nonfinancial sector. In turn, the condition of the nonfinancial sector hinges on the strength of financial institutions' balance sheets, as the nonfinancial sector obtains funding through the financial sector. Monitoring risks to financial stability is aimed at better understanding these complex linkages and has been an important part of Federal Reserve efforts in pursuit of overall economic stability.

A stable financial system, when hit by adverse events, or "shocks," is able to continue meeting demands for financial services from households and businesses, such as credit provision and payment services. By contrast, in an unstable system, these same shocks are likely to have much

[1] For more information on how the Federal Reserve promotes a stable financial system, see *The Fed Explained,* under the "About the Fed" section of the Board's website at https://www.federalreserve.gov.

Box 3.1. Large, Complex Financial Institutions and Their Effect on the Broader Financial System

The Federal Reserve promotes a perspective on the supervision and regulation of large, complex financial institutions that accounts for the potential spillovers from distress at such institutions to the financial system and broader economy. This and other activities that have implications for financial stability are also discussed elsewhere in this annual report. For instance, a broader set of economic and financial developments are discussed in section 2, "Monetary Policy and Economic Developments," with the discussion in the main text concerning surveillance of economic and financial developments focused on financial stability. And the full range of activities associated with supervision of systemically important financial institutions, designated nonbank companies, and designated financial market utilities is discussed in section 4, "Supervision and Regulation."

larger effects, disrupting the flow of credit and leading to declines in employment and economic activity.

Consistent with this view of financial stability, the Federal Reserve Board's monitoring framework distinguishes between shocks to and vulnerabilities of the financial system. Shocks, such as sudden changes to financial or economic conditions, are inherently hard to predict. Vulnerabilities tend to build up over time and are the aspects of the financial system that are most expected to cause widespread problems in times of stress.

Accordingly, the Federal Reserve maintains a flexible, forward-looking financial stability monitoring program focused on assessing the financial system's vulnerabilities to a wide range of potential adverse shocks (see box 3.1 for more information on large, complex financial institutions and monitoring potential spillovers).

Each quarter, the Federal Reserve Board staff assesses a set of vulnerabilities relevant for financial stability, including but not limited to asset valuation pressures, borrowing by businesses and households, leverage in the financial sector, and funding risk. These monitoring efforts inform discussions concerning policies to promote financial stability, such as supervision and regulatory policies as well as monetary policy. They also inform Federal Reserve interactions with broader monitoring efforts, such as those by the FSOC and the Financial Stability Board (FSB).

The Federal Reserve Board publishes its *Financial Stability Report* on a semiannual basis.[2] The report summarizes the Board's framework for assessing the resilience of the U.S. financial system and presents the Board's current assessment of financial system vulnerabilities. It aims to promote public understanding about Federal Reserve views on this topic and thereby increase transparency and accountability. The report complements the annual report of the FSOC, which is

[2] See Board of Governors of the Federal Reserve System (2020), *Financial Stability Report* (Washington: Board of Governors, May), https://www.federalreserve.gov/publications/files/financial-stability-report-20200515.pdf; and Board of Governors of the Federal Reserve System (2020), *Financial Stability Report* (Washington: Board of Governors, November), https://www.federalreserve.gov/publications/files/financial-stability-report-20201109.pdf.

chaired by the Secretary of the Treasury and includes the Federal Reserve Chair and other financial regulators.

Asset Valuation Pressures

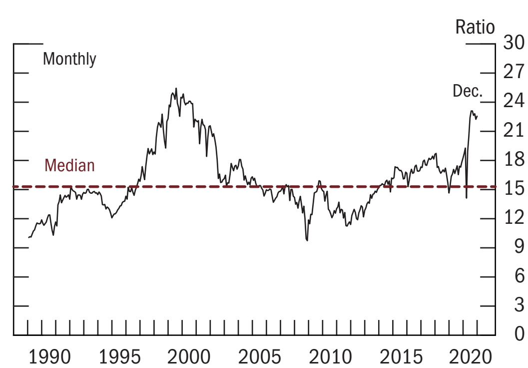
Overvalued assets are a fundamental source of vulnerability because the unwinding of high prices can be destabilizing, especially if the assets are widely held and the values are supported by excessive leverage, maturity transformation, or risk opacity. Moreover, stretched asset valuations are likely to be an indicator of a broader buildup in risk-taking.

Nonetheless, it is very difficult to judge whether an asset price is overvalued relative to fundamentals. As a result, the Federal Reserve's analysis of asset valuation pressures typically includes a broad range of possible valuation metrics and tracks developments in areas in which asset prices are rising particularly rapidly, into which investor flows have been considerable, or where volatility has been at unusually low or high levels.

Overall, asset valuation pressures, which were elevated before the COVID-19 outbreak in the United States, dropped at the beginning of the outbreak as asset prices plummeted. However, asset prices subsequently retraced and surpassed their pre-pandemic levels in most markets by the end of 2020. In particular, prices in equity, corporate bond, and residential real estate markets returned to or exceeded pre-pandemic levels, buoyed in part by positive vaccine-related news, additional fiscal stimulus, and better-than-expected economic data.

After rebounding in the spring of 2020 from their COVID-related declines, broad stock prices climbed over the course of 2020. Stock prices also rose considerably relative to the forecasts of corporate earnings despite significant uncertainty in the earnings outlook among market participants (figure 3.1). Measures of realized and implied stock price volatility for the S&P 500 index—the 20-day realized volatility and the VIX, respectively—decreased sharply from their very high levels at the end of the second quarter but remained moderately above their historical medians by the end of 2020.

Figure 3.1. Aggregate forward price-to-earnings ratio of S&P 500 firms, 1989–2020

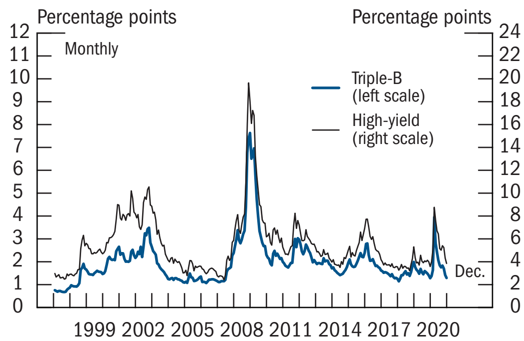


Note: The data extend through December 2020. Based on expected earnings for 12 months ahead.

Source: Federal Reserve Board staff calculations using Refinitiv (formerly Thomson Reuters), Institutional Brokers Estimate System Estimates.

At the onset of the pandemic, corporate bond market functioning was adversely affected as

Figure 3.2. Corporate bond spreads to similar-maturity Treasury securities, 1997–2020



Note: The data extend through December 2020. The triple-B series reflects the options-adjusted spread of the ICE BofAML triple-B U.S. Corporate Index (C0A4), and the high-yield series reflects the options-adjusted spread of the ICE BofAML U.S. High Yield Index (H0A0).

Source: ICE Data Indices, LLC, used with permission.

liquidity conditions deteriorated: Bid-ask spreads widened considerably, and bond mutual funds and exchange-traded funds experienced large outflows. Spreads of yields on corporate bonds over comparable-maturity Treasury yields increased significantly during the early period of the pandemic (figure 3.2).

Subsequently, liquidity conditions as well as investor risk appetite improved following the Federal Reserve's announcement in late March of a range of measures to support market functioning and the flow of credit (see box 3.2).

In the second half of 2020, the resilience of the economy, as well as the emergency approval of vaccines and optimism about further fiscal support late last year, contributed to a notable improvement in the outlook for corporate earnings and credit quality that drove declines in yields on corporate bonds. However, spreads in sectors heavily affected by the pandemic—such as the energy, airline, and leisure industries—closed the year at elevated levels.

Borrowing by Households and Businesses

Excessive borrowing by households and businesses has been an important contributor to past financial crises. Highly indebted households and nonfinancial businesses may be vulnerable to negative shocks to incomes or asset values and may be forced to curtail spending, which could amplify the effects of financial shocks.

In turn, financial stress among households and businesses can lead to mounting losses at financial institutions, creating an adverse feedback loop in which weaknesses among households, nonfinancial businesses, and financial institutions cause further declines in income and accelerate financial losses, potentially leading to financial instability and a sharp contraction in economic activity.

Vulnerabilities associated with business and household debt increased over the course of 2020. Before the COVID-19 outbreak, the combined total debt owed by businesses and households expanded at a pace similar to that of nominal gross domestic product (GDP) for several years.

Box 3.2. Facilities to Support the Economy during the COVID-19 Crisis

In the immediate wake of the pandemic, the Federal Reserve took forceful actions and established emergency lending facilities, with the approval of the Secretary of the Treasury as needed. These actions and facilities supported the flow of credit to households and businesses and served as backstop measures that, over the course of 2020, gave confidence to investors that support would be made available should financial conditions deteriorate substantially.

Many of the facilities have closed, but the Paycheck Protection Program Liquidity Facility (PPPLF) and facilities serving dollar funding markets remain open. The PPPLF was established to extend credit to lenders that participate in the Paycheck Protection Program of the Small Business Administration (SBA), which has provided critical support for small businesses. Through the end of 2020, the Federal Reserve had made about 15,000 PPPLF advances to roughly 850 financial institutions, totaling about $100 billion in liquidity.

The Federal Reserve took actions that reduced spillovers to the U.S. economy from foreign financial stresses. Temporary U.S. dollar liquidity swap lines were established in March 2020, in addition to the preexisting standing lines, and improved liquidity conditions in dollar funding markets in the United States and abroad by providing foreign central banks with the capacity to deliver U.S. dollar funding to institutions in their jurisdictions during times of market stress.

The FIMA (Foreign and International Monetary Authorities) Repo Facility has helped support the smooth functioning of the U.S. Treasury market by providing a temporary source of U.S. dollars to a broad range of countries, many of which do not have swap line arrangements with the Federal Reserve. The temporary swap lines and the FIMA Repo Facility will continue to serve as liquidity backstops until their scheduled expiration at the end of September 2021.

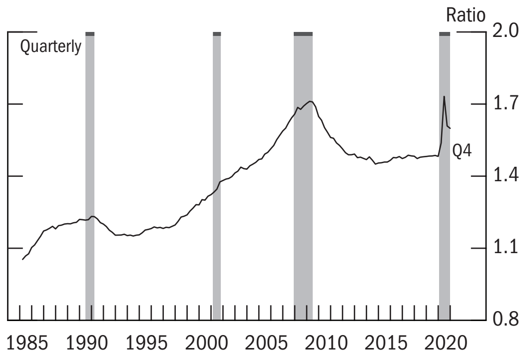
Five other facilities established at the onset of the pandemic expired either at the end of December 2020 or at the beginning of January 2021, and three expired on March 31, 2021.

The Primary Market Corporate Credit Facility, the Secondary Market Corporate Credit Facility, and the Municipal Liquidity Facility were established to improve the flow of credit through bond markets, where large firms and municipalities obtain most of their long-term funding. The Term Asset-Backed Securities Loan Facility was also set up to support the issuance of securities backed by student loans, auto loans, credit card loans, loans backed by the SBA, and certain other assets. Altogether, these facilities brought rapid improvements to credit markets, with only modest direct interventions, and continued to backstop those markets until the facilities expired at the end of 2020.

The Main Street Lending Program (Main Street) expired at the beginning of January 2021. In its period of operation, Main Street purchased about 1,800 loan participations, totaling more than $16 billion, which helped small and medium-sized businesses from some of the hardest-hit areas of the country and covered a wide range of industries.

The Commercial Paper Funding Facility (CPFF), the Money Market Mutual Fund Liquidity Facility (MMLF), and the Primary Dealer Credit Facility (PDCF) stabilized short-term funding markets and improved the flow of credit to households and businesses. Although balances in the PDCF, CPFF, and MMLF fell from their initial highs to low levels by the end of 2020, the facilities served as important backstops against further market stress until their expiration in March 2021.

Figure 3.3. Private nonfinancial-sector credit-to-GDP ratio, 1985–2020



Note: The data extend through 2020:Q4. The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research: July 1990 to March 1991, March 2001 to November 2001, December 2007 to June 2009, and February 2020 to December 2020. GDP is gross domestic product.

Source: Federal Reserve Board staff calculations based on Bureau of Economic Analysis, national income and product accounts, and Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

In the first half of 2020, credit growth accelerated and reached about 9 percent in annualized terms, mostly reflecting significant business borrowing. The precipitous drop in GDP following the outbreak and the increase in business borrowing caused a dramatic rise in the credit-to-GDP ratio to historical highs (figure 3.3). In the second half of 2020, this ratio fell markedly, as GDP partially rebounded and debt changed little. Government lending, relief programs, and low interest rates mitigated strains in the business and household sectors.

In 2020, household debt (adjusted for general price inflation) edged higher on net. Debt owed by the one-half of households with prime credit scores continued to account for almost all of the growth. By contrast, inflation-adjusted loan balances for borrowers with near-prime credit scores changed little over 2020, and balances for borrowers with subprime scores fell.

Mortgage debt accounted for roughly two-thirds of total household credit, with mortgage extensions skewed toward prime borrowers in recent years. Widespread loss-mitigation measures and low interest rates have helped damp the effect of the pandemic on mortgage delinquencies.

Most of the remaining one-third of total debt owed by households was consumer credit, consisting mainly of student loans, auto loans, and credit card debt. Credit card balances decreased in 2020, while auto loan balances expanded moderately. Many student loan borrowers benefited from payment suspensions and waived interest payments as part of the Coronavirus Aid, Relief, and Economic Security Act.

Borrowing by businesses, likely seeking to bridge pandemic-related interruptions to revenues, was extremely high in the first half of 2020. An indicator of the leverage of large businesses—the ratio of debt to assets for all publicly traded nonfinancial firms—reached its highest level in 20 years by mid-2020. As the growth in outstanding debt slowed later in the year, the same ratio declined but, at the end of the year, still stood above the levels leading up to the pandemic.

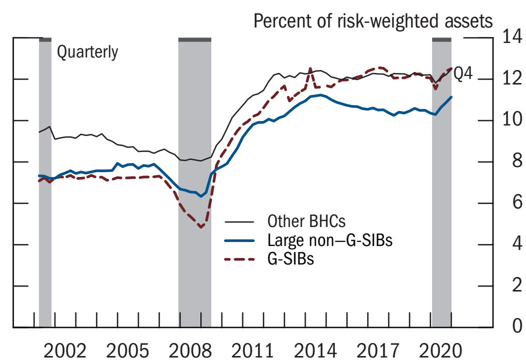
Credit quality deteriorated after the onset of the pandemic but stabilized in the second half of 2020, particularly among large firms. Correspondingly, the pace of corporate bond downgrades was elevated through the spring of 2020 but came down to normal levels later in the year.

Leverage in the Financial System

The U.S. banking system remained resilient throughout 2020, in part because of the regulatory reforms prompted by the 2007–09 recession, forceful interventions by the Federal Reserve, and fiscal stimulus. When the pandemic intensified in March, large capital buffers allowed banks to meet the substantially increased loan demand from businesses while providing payment relief and other types of forbearance to households. That additional lending pushed up risk-weighted assets at the same time that increased loan loss provisions eroded profitability.

As a result, the aggregate common equity Tier 1 ratio—a regulatory risk-based measure of bank capitalization—declined significantly in the first quarter (figure 3.4). However, capital ratios ended the year at new highs, not only because of the Federal Reserve Board's decision to restrict capital payouts by large banks, but also because of declines in risk-weighted assets driven by paydowns of business loans and credit card loans, reduced loan demand more generally, and tightened lending standards.[3] Bank profitability also improved in the second half of 2020 because of a combination of lower-than-expected losses, a better economic outlook, and strong noninterest income.

Figure 3.4. Common equity Tier 1 ratio of banks, 2001–20



Note: The data, which extend through 2020:Q4, are seasonally adjusted by Federal Reserve Board staff. Before 2014:Q1, the numerator of the common equity Tier 1 ratio is Tier 1 common capital for advanced approaches bank holding companies (BHCs) and intermediate holding companies (IHCs) (before 2015:Q1, for non-advanced approaches BHCs). Afterward, the numerator is common equity Tier 1 capital. G-SIBs are global systemically important U.S. banks. Large non–G-SIBs are BHCs and IHCs with greater than $100 billion in total assets that are not G-SIBs. The denominator is risk-weighted assets. The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research: March 2001 to November 2001, December 2007 to June 2009, and February 2020 to December 2020.

Source: Federal Reserve Board, Form FR Y-9C, Consolidated Financial Statements for Holding Companies.

In June 2020, the Federal Reserve released the results of the 2020 Dodd-Frank Act stress tests and the Comprehensive Capital Analysis and Review along with a sensitivity analysis to assess the resilience of large banks under three hypothetical downside scenarios related to the coronavirus

[3] The Federal Reserve took steps in June 2020 to restrict capital distributions in the third quarter by banks with more than $100 billion in assets, including prohibiting share repurchases and limiting dividends based on the previous four quarters of earnings. These restrictions were later extended to the fourth quarter.

event. The analysis under the more severe downside scenarios showed that most banks would have remained well capitalized, but several approached their minimum capital levels.[4]

In December, the Federal Reserve released results from the second round of bank stress tests for 2020, which showed that all banks would remain well capitalized under two updated severely adverse supervisory scenarios.

Outside the banking sector, leverage at broker-dealers changed little over 2020 and remained at historically low levels by the end of the year. While the liquidity deterioration across dealer-intermediated markets in March 2020 demonstrated potential fragility despite dealers' low leverage, this fragility was mitigated by emergency lending facilities and the supervisory actions of the Federal Reserve.

Gross leverage at hedge funds declined in the first half of 2020 to roughly the middle of its historical distribution. The COVID-19 shock exposed vulnerabilities at hedge funds. Extreme market volatility and lower liquidity in asset markets led to substantial losses at some hedge funds and sizable margin calls.[5] While data on hedge fund leverage come from different sources with various lags, most measures increased in the second half of 2020 and are now somewhat above their historical averages, reversing the decrease in the first half of the year. Finally, leverage at life insurance companies rose to post-2008 highs during the course of 2020.

Funding Risk

At the onset of the pandemic, banks had substantial quantities of liquid assets, and their reliance on the most unstable sources of funding stood at historically low levels. Those liquidity positions improved further over the rest of 2020, as banks experienced heavy deposit inflows and their liquid asset positions increased substantially (figure 3.5).

Many types of nonbank financial institutions, however, experienced funding difficulties in the first half of 2020. For example, prime money market funds (MMFs), particularly institutional funds, experienced runs in March, with outflows reaching the same proportion of assets redeemed during the run on MMFs in 2008.

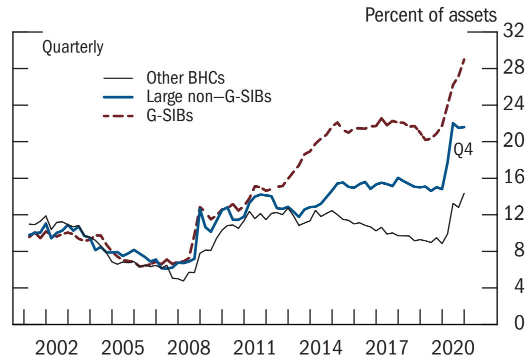
Heavy redemptions from these funds reportedly were prompted in part by investor concerns about the possibility of liquidity fees and redemption gates. As investors fled to safety, actions by the Federal Reserve were required to slow withdrawals and restore the functioning of short-term

[4] See Board of Governors of the Federal Reserve System (2020), "Federal Reserve Board Releases Results of Stress Tests for 2020 and Additional Sensitivity Analyses Conducted in Light of the Coronavirus Event," press release, June 25, https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200625c.htm.

[5] See the box "A Retrospective on the March 2020 Turmoil in Treasury and Mortgage-Backed Securities Markets" in Board of Governors of the Federal Reserve System (2020), *Financial Stability Report* (Washington: Board of Governors, November), pp. 32–38, https://www.federalreserve.gov/publications/files/financial-stability-report-20201109.pdf.

funding markets. Since the onset of the pandemic, assets under management at prime MMFs have declined steadily.

Figure 3.5. Liquid assets held by banks, 2001–20



Note: The data extend through 2020:Q4. Liquid assets are cash plus estimates of securities that qualify as high-quality liquid assets as defined by the liquidity coverage ratio requirement. Accordingly, Level 1 assets as well as discounts and restrictions on Level 2 assets are incorporated into the estimate. G-SIBs are global systemically important U.S. banks. Large non–G-SIBs are bank holding companies (BHCs) and intermediate holding companies with greater than $100 billion in total assets.

Source: Federal Reserve Board, Form FR Y-9C, Consolidated Financial Statements for Holding Companies.

Domestic and International Cooperation and Coordination

The Federal Reserve cooperated and coordinated with both domestic and international institutions in 2020 to promote financial stability.

Financial Stability Oversight Council Activities

As mandated by the Dodd-Frank Act, the FSOC was created in 2010 and, as noted earlier, is chaired by the Treasury Secretary and includes the Federal Reserve Chair as a member (see box 3.3). It established an institutional framework for identifying and responding to the sources of systemic risk.

Through collaborative participation in the FSOC, U.S. financial regulators monitor not only institutions, but also the financial system as a whole. The Federal Reserve, in conjunction with other participants, assists in monitoring financial risks, analyzes the implications of those risks for financial stability, and identifies steps that can be taken to mitigate those risks. In addition, when an institution is designated by the FSOC as systemically important, the Federal Reserve assumes responsibility for supervising that institution.

In 2020, the FSOC continued to serve as a central venue for member agencies to coordinate risk analysis and policy enactment—a function that took on particular significance around the COVID-19 event. The council increased the frequency of staff-level meetings, providing member agencies with timely analysis and a venue to exchange views and coordinate responses.

Financial Stability Board Activities

In light of the interconnected global financial system and the global activities of large U.S. financial institutions, the Federal Reserve participates in international bodies, such as the FSB. The FSB monitors the global financial system and promotes financial stability through the development

Box 3.3. Regular Reporting on Financial Stability Oversight Council Activities

The Federal Reserve cooperated and coordinated with domestic agencies in 2020 to promote financial stability, including through the activities of the Financial Stability Oversight Council (FSOC).

Meeting minutes. In 2020, the FSOC met five times and held two notational votes. The minutes for each meeting are available on the U.S. Treasury website (https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/fsoc/council-meetings/meeting-minutes).

FSOC annual report. On December 3, 2020, the FSOC released its 10th annual report (https://home.treasury.gov/system/files/261/FSOC2020AnnualReport.pdf), which includes a review of key developments in 2020 and a set of recommended actions that could be taken to ensure financial stability and to mitigate systemic risks that affect the economy.

For more details on the FSOC, see https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/fsoc.

of sound policies that can be implemented across countries. The Federal Reserve is a member of the FSB, along with the Securities and Exchange Commission and the U.S. Treasury.

In the past year, the FSB has examined several issues, including monitoring of nonbank financial intermediation, the use and effectiveness of COVID-related policy response measures, evaluating the effects of too-big-to-fail reforms, challenges in cross-border payments systems, monitoring and evaluation of channels through which climate-related risks could affect financial stability, challenges in correspondent banking, the regulatory issues regarding the emergence and use of so-called global stablecoins, transitioning away from the use of LIBOR (London interbank offered rate), asset management, fintech (emerging financial technologies), and development of effective resolution regimes for large financial institutions.

In addition, the FSB formed a high-level steering group on nonbank financial intermediation that developed a detailed work plan to analyze and address vulnerabilities. This steering group agreed to develop policy options to strengthen resilience in MMFs, which will be published in 2021.

4 | Supervision and Regulation

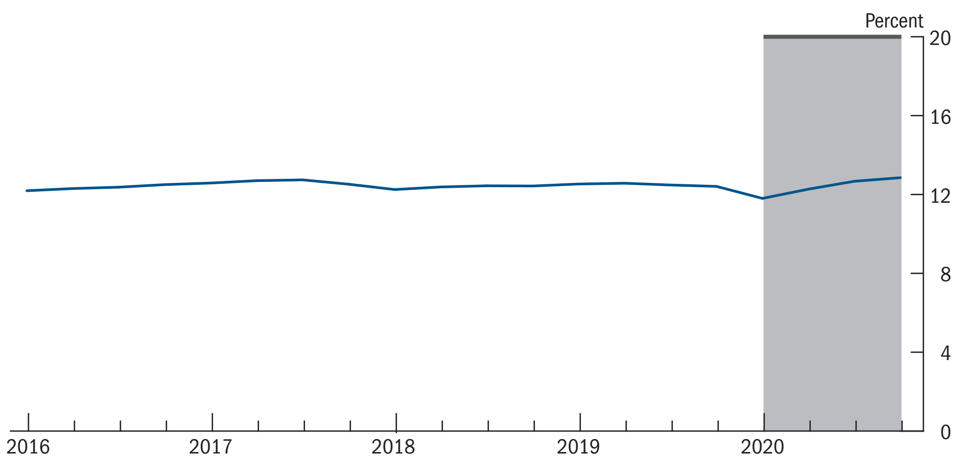
The Federal Reserve promotes a safe, sound, and efficient banking and financial system that supports the growth and stability of the U.S. economy. This section discusses the institutions supervised and regulated by the Federal Reserve as well as the key supervisory and regulatory activities undertaken by the Federal Reserve during 2020 (also see figure 4.1):

- supervising the activities of financial institutions to ensure their safety and soundness
- developing regulatory policy (for example, rulemakings, policy statements, and guidance) and acting on applications filed by banking organizations

The Federal Reserve also monitors trends in the banking sector by collecting and analyzing data, along with the other federal financial regulatory agencies (see box 4.1).

Figure 4.1. Banks monitored by the Federal Reserve entered the COVID event with strong capital positions and built further capital in 2020

The aggregate common equity tier 1 (CET1) capital ratio exceeded its pre-COVID event level in the second half of 2020. At year-end, capital ratios remained well above regulatory minimums at nearly all firms, providing a buffer to absorb losses and support lending as the economy recovers.



Note: The shaded bar indicates Q1:2020 through Q4:2020 data.

Source: Call Report and FR Y-9C.

Box 4.1. Banking Sector Conditions

For more information on banking sector conditions, see the *Supervision and Regulation Report*, which is submitted semiannually to the Senate Committee on Banking, Housing, and Urban Affairs and to the House Committee on Financial Services. The reports are available on the Board's website at https://www.federalreserve.gov/publications/supervision-and-regulation-report.htm, and are delivered concurrently with testimony from the Federal Reserve Board Vice Chair for Supervision.

Supervised and Regulated Institutions

The Federal Reserve categorizes banking organizations into different groups based on their risk profiles, as described in table 4.1.

State Member Banks

At year-end 2020, a total of 1,501 banks (excluding non-depository trust companies and private banks) were members of the Federal Reserve System, of which 734 were state chartered. Federal Reserve System member banks operated 50,123 branches and accounted for 34 percent of all commercial banks in the United States and 68 percent of all commercial banking offices. State-chartered commercial banks that are members of the Federal Reserve, commonly referred to as state member banks, represented approximately 17 percent of all insured U.S. commercial banks and held approximately 17 percent of all insured commercial bank assets in the United States.

Bank Holding Companies

At year-end 2020, a total of 4,032 U.S. bank holding companies (BHCs) were in operation, of which 3,603 were top-tier BHCs. These organizations controlled 3,712 insured commercial banks and held approximately 94 percent of all insured commercial bank assets in the United States.

BHCs that meet certain capital, managerial, and other requirements may elect to become financial holding companies (FHCs). FHCs can generally engage in a broader range of financial activities than other BHCs. As of year-end 2020, a total of 502 domestic BHCs and 44 foreign banking organizations had FHC status. Of the domestic FHCs, 22 had consolidated assets of $100 billion or more; 59 between $10 billion and $100 billion; 178 between $1 billion and $10 billion; and 243 less than $1 billion.

Savings and Loan Holding Companies

At year-end 2020, a total of 328 savings and loan holding companies (SLHCs) were in operation, of which 169 were top-tier SLHCs. These SLHCs controlled 177 depository institutions. Approximately 92 percent of SLHCs engage primarily in depository activities. These firms hold approximately 16.6 percent ($344 billion) of the total combined assets of all SLHCs. The Office of the

Table 4.1. Summary of supervised institutions

Portfolio	Definition	Number of institutions	Total assets ($ trillions)
Large Institution Supervision Coordinating Committee (LISCC)	Eight U.S. global systemically important banks (G-SIBs)	8	13.5
State member banks	State member banks within LISCC organizations	4	1
Large and foreign banking organizations (LFBOs)	Non-LISCC U.S. firms with total assets $100 billion and greater and FBOs	174	9.1
Large banking organizations (LBOs)	Non-LISCC U.S. firms with total assets $100 billion and greater	16	4.2
Large foreign banking organizations (FBOs)	FBOs with combined U.S. assets $100 billion and greater	18	3.8
Small FBOs (excluding representative offices)	FBOs with combined U.S. assets less than $100 billion	110	1
Small FBOs (representative offices)	FBO U.S. representative offices	30	0
State member banks	State member banks within LFBOs	9	1.2
Regional banking organizations (RBOs)	Total assets between $10 billion and $100 billion	89	2.5
State member banks	State member banks within RBOs	39	0.9
Community banking organizations (CBOs)	Total assets less than $10 billion	3,696*	2.7
State member banks	State member banks within CBOs	682	0.6
Insurance and commercial savings and loan holding companies (SLHCs)	SLHCs primarily engaged in insurance or commercial activities	7 insurance 4 commercial	1.1

Note: Three foreign banking organizations transferred from the LISCC portfolio to the LFBO portfolio, effective January 1, 2021. These three firms are reflected in the LFBO portfolio in this table.
* Includes 3,638 holding companies and 58 state member banks that do not have holding companies.

Comptroller of the Currency (OCC) or the Federal Deposit Insurance Corporation (FDIC) is the primary federal regulator for subsidiary savings associations of SLHCs. Thirteen SLHCs are engaged primarily in nonbanking activities, such as insurance underwriting (7 SLHCs), securities brokerage (2 SLHCs), and commercial activities (4 SLHCs). The 25 largest SLHCs accounted for more than $1.98 trillion of total combined assets.

Savings and loan holding companies significantly engaged in insurance activities. At year-end 2020, the Federal Reserve supervised seven insurance SLHCs, with $1.1 trillion in estimated total combined assets, and $166 billion in insured depository assets. Four of these firms have total assets greater than $100 billion and for six of the seven, insured depository assets represent less than half of total assets.

As the consolidated supervisor of insurance SLHCs, the Federal Reserve evaluates an organization’s risk-management practices, the financial condition of the overall organization, and the impact of the nonbank activities on the depository institution. The Federal Reserve relies to the fullest extent possible on the work of the primary regulators, including other federal banking regulators and state insurance regulators, as part of the overall supervisory assessment of insurance SLHCs.

In 2020, the Federal Reserve's Insurance Policy Advisory Committee (IPAC) focused its advice on the Board's proposed Building Block Approach to establish capital requirements for insurance depository institution holding companies.[1] The IPAC, established by the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA) to provide information, advice, and recommendations on insurance issues, consists of 21 insurance experts and usually meets three times each year. For more information on IPAC efforts, see https://www.federalreserve.gov/aboutthefed/ipac.htm.

Financial Market Utilities

Financial market utilities (FMUs) manage or operate multilateral systems for the purpose of transferring, clearing, or settling payments, securities, or other financial transactions among financial institutions or between financial institutions and the FMU. The Federal Reserve supervises FMUs that are chartered as member banks or Edge Act corporations, and coordinates with other federal banking supervisors to supervise FMUs considered bank service providers under the Bank Service Company Act (BSCA).

In July 2012, the Financial Stability Oversight Council voted to designate eight FMUs as systemically important under title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act). As a result of these designations, the Board assumed an expanded set of responsibilities related to these designated FMUs that includes promoting uniform risk-management standards, playing an enhanced role in the supervision of designated FMUs, reducing systemic risk, and supporting the stability of the broader financial system. For certain designated FMUs, the Board established risk-management standards and expectations that are articulated in the Board's Regulation HH.

In addition to setting minimum risk-management standards, Regulation HH establishes requirements for the advance notice of proposed material changes to the rules, procedures, or operations of a designated FMU for which the Board is the supervisory agency under title VIII. Finally, Regulation HH also establishes minimum conditions and requirements for a Federal Reserve Bank to establish and maintain an account for, and provide services to, a designated FMU.[2] Where the Board is not the title VIII supervisory agency, the Federal Reserve works closely with the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission to promote robust FMU risk management and monitor systemic risks across the designated FMUs.

International Activities

Foreign operations of U.S. banking organizations. At the end of 2020, a total of 27 banks were operating 308 branches in foreign countries and overseas areas of the United States. Fourteen

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[1] 84 Fed. Reg. 57,240 (October 24, 2019), https://www.govinfo.gov/content/pkg/FR-2019-10-24/pdf/2019-21978.pdf.

[2] The Federal Reserve Banks maintain accounts for and provide services to several designated FMUs.

national banks were operating 248 of these branches, 13 state member banks were operating 47 of these branches, and 5 nonmember banks were operating the remaining 13.

Edge Act and agreement corporations. At year-end 2020, out of 35 banking organizations chartered as Edge Act or agreement corporations, 3 operated 6 Edge Act and agreement branches. These corporations are examined annually.

U.S. activities of foreign banks. As of year-end 2020, a total of 137 foreign banks from 48 countries operated 148 state-licensed branches and agencies, of which 6 were insured by the FDIC, and 51 OCC-licensed branches and agencies, of which 4 were insured by the FDIC. These foreign banks also owned 7 Edge Act and agreement corporations. In addition, they held a controlling interest in 36 U.S. commercial banks. Altogether, the U.S. offices of these foreign banks controlled approximately 17 percent of U.S. commercial banking assets. These 137 foreign banks also operated 66 representative offices; an additional 32 foreign banks operated in the United States through a representative office.

The Federal Reserve conducted or participated with state and federal regulatory authorities in 540 examinations of foreign banks in 2020.

Supervisory Developments

Supervisory and Regulatory Initiatives

The Federal Reserve's supervision activities include examinations and inspections to ensure that financial institutions operate in a safe and sound manner and comply with laws and regulations. These include an assessment of a financial institution's risk-management systems, financial conditions, and compliance. The Federal Reserve tailors its supervisory approach based on the size and complexity of firms—supervisory oversight ranges from a continuous supervisory presence with dedicated teams of examiners for large firms to regular point-in-time and targeted periodic examinations for small, noncomplex firms.

At the start of the COVID event, the Federal Reserve temporarily adjusted its supervisory approach. From March through the beginning of June, examiners focused on monitoring and reduced examination activities, with the greatest reduction occurring at the smallest banks. The Federal Reserve's supervisory approach gave firms time to adapt to the COVID event and provide customers with needed assistance. Financial institutions implemented contingency operating plans and adapted operations to the new environment. In June, examination activities resumed for all firms. All examination activities are currently being conducted off site, until local conditions improve to facilitate on-site examinations. For additional information on the Federal Reserve's COVID response, see box 4.2.

Box 4.2. Supervisory and Regulatory Response to COVID-19

In response to the COVID event, the Federal Reserve took a number of supervisory and regulatory actions. These actions were intended to help financial institutions deploy their resources as efficiently as possible while continuing to support their customers and local economies in a prudent and fair manner.

For more information on the Federal Reserve's response to the COVID event, see the *Supervision and Regulation Report*, which is submitted semiannually to the Senate Committee on Banking, Housing, and Urban Affairs and to the House Committee on Financial Services. The reports are available on the Board's website at https://www.federalreserve.gov/publications/supervision-and-regulation-report.htm, and are delivered concurrently with testimony from the Federal Reserve Board Vice Chair for Supervision.

In 2020, the Federal Reserve conducted 263 examinations of state member banks, 2,704 inspections of bank holding companies, and 146 inspections at savings and loan holding companies. Tables 4.2 and 4.3 provide information on examinations and inspections conducted by the Federal Reserve during the past five years.

Specialized Examinations

The Federal Reserve conducts specialized examinations of supervised financial institutions in the areas of capital planning and stress testing, information technology, fiduciary activities, transfer agent activities, government and municipal securities dealing and brokering, and cybersecurity and critical infrastructure. The Federal Reserve also conducts specialized examinations of certain nonbank entities that extend credit subject to the Board's margin regulations.

Table 4.2. Savings and loan holding companies, 2016–20

Entity/item	2020	2019	2018	2017	2016
Top-tier savings and loan holding companies					
Assets of more than $1 billion					
Total number	50	53	55	59	67
Total assets (billions of dollars)	2,026	1,822	1,615	1,696	1,664
Number of inspections	55	52	40	52	54
By Federal Reserve System	55	52	40	52	54
On site	34	30	20	31	34
Off site	21	22	20	21	20
Assets of $1 billion or less					
Total number	119	134	139	164	171
Total assets (billions of dollars)	39	39	38	47	50
Number of inspections	91	102	107	165	181
By Federal Reserve System	91	102	107	165	181
On site	3	3	1	9	9
Off site	88	99	106	156	172

Table 4.3. State member banks and bank holding companies, 2016–20

Entity/item	2020	2019	2018	2017	2016
State member banks					
Total number	734	754	794	815	829
Total assets (billions of dollars)	3,568	2,642	2,851	2,729	2,577
Number of examinations	502	554	563	643	663
By Federal Reserve System	263	327	321	354	406
By state banking agency	239	227	242	289	257
Top-tier bank holding companies					
Assets of more than $1 billion					
Total number	746	631	604	583	569
Total assets (billions of dollars)	23,811	20,037	19,233	18,762	17,593
Number of inspections	875	805	549	597	659
By Federal Reserve System[1]	814	761	533	574	646
On site	452	466	325	394	438
Off site	362	295	208	180	208
By state banking agency	61	44	16	23	13
Assets of $1 billion or less					
Total number	2,887	3,094	3,273	3,448	3,682
Total assets (billions of dollars)	883	870	893	931	914
Number of inspections	1,967	2,122	2,216	2,318	2,597
By Federal Reserve System	1,890	2,033	2,132	2,252	2,525
On site	17	71	81	101	126
Off site	1,873	1,962	2,051	2,151	2,399
By state banking agency	77	89	84	66	72
Financial holding companies					
Domestic	502	493	490	492	473
Foreign	44	44	44	42	42

[1] For bank holding companies subject to continuous, risk-focused supervision, includes multiple targeted reviews.

Capital Planning and Stress Testing

Since the 2007–09 financial crisis, the Board has led a series of initiatives to strengthen the capital planning practices and positions of the largest banking organizations. The Federal Reserve's Dodd-Frank Act stress test (DFAST) includes annual supervisory and company-run stress tests. In March 2020, the Board integrated the stress test with its non-stress capital requirements through the stress capital buffer into one forward-looking and risk-sensitive capital framework.

In 2020, the Federal Reserve evaluated the capital planning processes and capital positions of 33 of the largest banking firms. In June, the Board conducted its annual stress test and an additional assessment of bank capital during the COVID event. The results showed that large banks had strong levels of capital, but considerable economic uncertainty remained. In response, the

Box 4.3. Capital Planning and Stress Testing Publications Released in 2020

More details on the 2020 DFAST results are available at https://www.federalreserve.gov/publications/files/2020-dfast-results-20200625.pdf.

More details on the 2020 sensitivity analysis results are available at https://www.federalreserve.gov/publications/files/2020-sensitivity-analysis-20200625.pdf.

More details on the 2020 December stress test results are available at https://www.federalreserve.gov/publications/files/2020-dec-stress-test-results-20201218.pdf.

Board required subject firms to resubmit their capital plans and implemented capital distribution restrictions to ensure that banks would preserve capital. A second round of stress test results were released in December, which also found that large banks remained well-capitalized under two separate hypothetical recessions. For stress tests and sensitivity analysis results, see box 4.3.

Information Technology Activities

During 2020, the Federal Reserve conducted examinations of information technology activities (inclusive of cyber risk management activities) at financial institutions. Additionally, under the authority of the BSCA, the Federal Reserve, FDIC, and OCC (the federal banking agencies) examine and assign Uniform Rating System for Information Technology ratings to technology service providers that provide services for specific regulated financial institutions.

In 2020, the Federal Financial Institutions Examination Council (FFIEC), of which the Federal Reserve is a member, issued guidance for the examination of financial institutions and their service providers.[3]

In April, the FFIEC also issued a statement to address the use of cloud computing services and security risk management principles in the financial services sector.[4]

Fiduciary Activities

In 2020, Federal Reserve examiners conducted 70 fiduciary examinations of state member banks and non-depository trust companies.

Transfer Agents

During 2020, the Federal Reserve conducted transfer agent examinations at two state member banks and three BHCs that were registered as transfer agents.

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[3] The FFIEC is an interagency body of financial regulatory agencies established to prescribe uniform principles, standards, and report forms and to promote uniformity in the supervision of financial institutions. The council has six voting members: the Board of Governors of the Federal Reserve System, the FDIC, the National Credit Union Administration, the OCC, the Consumer Financial Protection Bureau, and the chair of the State Liaison Committee.

[4] FFIEC Joint Statement on Security in a Cloud Computing Environment, https://www.ffiec.gov/press/PDF/FFIEC_Cloud_Computing_Statement.pdf.

Government and Municipal Securities Dealers and Brokers

The Federal Reserve is responsible for examining state member banks and foreign banks for compliance with the Government Securities Act of 1986 and with Treasury regulations governing dealing and brokering in government securities. During 2020, the Federal Reserve conducted four examinations of government securities activities at these organizations.

The Federal Reserve is also responsible for ensuring that state member banks and BHCs that act as municipal securities dealers comply with the Securities Act Amendments of 1975. Municipal securities dealers are examined, pursuant to the Municipal Securities Rulemaking Board's rule G-16, at least once every two calendar years. During 2020, the Federal Reserve examined five entities that dealt in municipal securities.

Securities Credit Lenders

Under the Securities Exchange Act of 1934, the Board is responsible for regulating credit in certain transactions involving the purchasing or carrying of securities. As part of its general examination program, the Federal Reserve examines the banks under its jurisdiction for compliance with the Board's Regulation U. In addition, the Federal Reserve maintains a registry of persons other than banks, brokers, and dealers who extend credit subject to Regulation U. Throughout the year, Federal Reserve examiners conducted specialized examinations of these lenders if they are not already subject to supervision by the Farm Credit Administration or the National Credit Union Administration.

Cybersecurity and Critical Infrastructure

The Federal Reserve collaborated with other financial regulators, the U.S. Treasury, private industry, and international partners to promote effective safeguards against cyber threats to the financial services sector and to bolster the sector's cyber resiliency. Throughout the year, Federal Reserve examiners conducted targeted cybersecurity assessments of the largest and most systemically important financial institutions, FMUs, and service providers. The Federal Reserve worked closely with the OCC and FDIC to implement improved examination procedures for the cybersecurity assessments of the largest, most systemically important banking organizations and of service providers. Federal Reserve examiners also continued to conduct tailored cybersecurity assessments at community and regional banking organizations.

The Federal Reserve actively participated in interagency groups, such as the Financial and Banking Information Infrastructure Committee (FBIIC), to share information and collaborate on cybersecurity and critical infrastructure issues affecting the financial sector. In coordination with FBIIC members, the Federal Reserve collaborated with government and industry stakeholders to discuss strategies to operate safely and effectively throughout the pandemic and plan for the return to normal operations.

In addition, the Federal Reserve was actively involved in international policy coordination to address cyber-related risks and efforts to bolster cyber resiliency. The Federal Reserve participated in the development of the Cyber Incident Response and Recovery Survey of Industry Practices issued by the Financial Stability Board (FSB). As part of the G-7 Cyber Expert Group, the Federal Reserve participated in activities to support the G-7 members' preparedness to coordinate communications in the event of a significant cross-border cyber incident.

Enforcement Actions

The Federal Reserve has enforcement authority over the financial institutions it supervises and their affiliated parties. Enforcement actions may be taken to address unsafe and unsound practices or violations of any law or regulation. Formal enforcement actions include cease and desist orders, written agreements, prompt corrective action directives, removal and prohibition orders, and civil money penalties.

In 2020, the Federal Reserve completed 59 formal enforcement actions. Civil money penalties totaling $192,179,939 were assessed. As directed by statute, all civil money penalties are remitted to either the Treasury or the Federal Emergency Management Agency. The Reserve Banks completed 38 informal enforcement actions. Informal enforcement actions include memoranda of understanding, commitment letters, supervisory letters, and board of directors' resolutions.

Enforcement orders and prompt corrective action directives, which are issued by the Board, and written agreements, which are executed by the Reserve Banks, are made public and are posted on the Board's website (https://www.federalreserve.gov/apps/enforcementactions/search.aspx).

Other Laws and Regulation Enforcement Activity/Actions

The Federal Reserve's enforcement responsibilities also extend to the disclosure of financial information by state member banks and the use of credit to purchase and carry securities.

Financial Disclosures by State Member Banks

Under the Securities Exchange Act of 1934 and the Federal Reserve's Regulation H, certain state member banks are required to make financial disclosures to the Federal Reserve using the same reporting forms that are normally used by publicly held entities to submit information to the SEC.[5]

[5] Under section 12(g) of the Securities Exchange Act, certain companies that have issued securities are subject to SEC registration and filing requirements that are similar to those that apply to public companies. Per section 12(i) of the Securities Exchange Act, the powers of the SEC over banking entities that fall under section 12(g) are vested with the appropriate banking regulator. Specifically, state member banks with 2,000 or more shareholders and more than $10 million in total assets are required to register with, and submit data to, the Federal Reserve. For more information on the Board's Regulation H policy action, see appendix E, "Record of Policy Actions."

In 2020, two state member banks were required to submit data to the Federal Reserve. The information submitted by these two state member banks is available to the public upon request and is primarily used for disclosure to the bank's shareholders and public investors.

Assessments for Supervision and Regulation

On May 24, 2018, EGRRCPA amended provisions in the Dodd-Frank Act as well as other statutes administered by the Board. One amendment made by EGRRCPA raised the minimum asset threshold for assessing BHCs and SLHCs for the cost of supervision. Starting with 2018 assessments, BHCs and SLHCs with total consolidated assets between $50 billion and $100 billion were no longer subject to assessments.

On November 19, 2020, the Board adopted a final rule to raise the minimum threshold for assessed BHCs and SLHCs and adjusted the amount charged to assessed companies with total consolidated assets between $100 billion and $250 billion. This aligns the Federal Reserve's assessment rule with its enhanced prudential standards framework for large banking organizations and EGRRCPA-related changes to the Federal Reserve's supervision and regulation of those companies.

As a collecting entity, the Board does not recognize the supervision and regulation assessments as revenue nor does the Board use the collections to fund Board expenses; the funds are transferred to the U.S. Treasury. The Board collected and transferred $606,871,191 in 2020 for the 2019 supervision and regulation assessment.

Training and Technical Assistance

The Federal Reserve provides training and technical assistance to foreign supervisors and minority-owned depository institutions, and engages in industry outreach in connection with supervisory objectives.

Current Expected Credit Losses Implementation

The Financial Accounting Standards Board issued an accounting standard in 2016 that overhauls the accounting for credit losses with a new impairment model based on the Current Expected Credit Losses (CECL) methodology. Approximately 200 banking organizations adopted the CECL methodology in 2020. Remaining banking organizations will adopt through 2023. CECL's implementation affects a broad range of supervisory activities, including regulatory reports, examinations, and examiner training.

During 2020, Board staff closely monitored the industry's first year of CECL implementation, provided industry outreach materials on CECL capital transition, and updated examiner training materials and work programs for CECL. Separately, in May and September 2020, the Board along with the OCC and FDIC issued an Interagency Policy Statement on Allowances for Credit Losses and a Regulatory Capital Rule: Revised Transition of the CECL Methodology for Allowances, respectively.

International Training and Technical Assistance

In 2020, the Federal Reserve continued to provide training and technical assistance on supervisory matters to foreign central banks and supervisory authorities. Technical assistance normally involves visits by Federal Reserve staff members to foreign authorities as well as consultations with foreign supervisors who visit the Board of Governors or the Reserve Banks. Due to travel restrictions resulting from the pandemic, the Federal Reserve offered a number of training programs virtually for the benefit of foreign supervisory authorities.

During 2020, Federal Reserve staff took part in training assignments led by the International Monetary Fund and the World Bank. Other training partners that collaborated with the Federal Reserve during 2020 to organize regional training programs included the South East Asian Central Banks Research and Training Centre and the Association of Bank Supervisors of the Americas.

Efforts to Support Minority-Owned Depository Institutions

The Federal Reserve System implements its responsibilities under section 367 of the Dodd-Frank Act primarily through its Partnership for Progress (PFP) program. Established in 2008, this program promotes the viability of minority depository institutions (MDIs) by facilitating activities designed to strengthen their business strategies, maximize their resources, and increase their awareness and understanding of supervisory expectations. The Federal Reserve has also taken MDIs into consideration when developing crisis response facilities.

In addition, the Federal Reserve continues to maintain the PFP website, which supports MDIs by providing them with technical information and links to useful resources (https://www.fedpartnership.gov). Representatives from each of the 12 Federal Reserve Districts, along with staff from the Divisions of Supervision & Regulation and Consumer & Community Affairs at the Board of Governors, continue to offer technical assistance tailored to MDIs by providing targeted supervisory guidance, identifying additional resources, and fostering mutually beneficial partnerships between MDIs and community organizations. As of year-end 2020, the Federal Reserve's MDI portfolio consisted of 14 state member banks.

Throughout 2020, the System supported MDIs and conducted a number of outreach initiatives, webinars, and conferences specific to MDIs, including the following:

- Throughout 2020, PFP staff hosted calls with a number of minority investor groups seeking advice on how to navigate the complex regulatory and statutory requirements for organizing their planned de novo banking organizations.

- Over the course of 2020, PFP staff also fielded inquiries from nonbank investors on how they might best organize for investment into MDIs.
- In March and April, the PFP individually, and in collaboration with the National Bankers Association (NBA), organized conference calls with MDIs to discuss the Federal Reserve's discount window operations and explain the Federal Reserve's newly expanded credit options.
- In April, Governor Michelle Bowman hosted a call with the NBA's senior leadership to gather their input on the impact of the COVID event on the NBA's members and the communities they serve. The NBA referenced the recommendations in its April 7, 2020, paper on the COVID event legislative and regulatory agenda.
- In May, the PFP helped promote to the NBA's MDI membership an "Ask the Regulator" call outlining the Federal Reserve's Paycheck Protection Program Liquidity Facility.
- In May, PFP staff hosted the majority of the Federal Reserve's 14 state-member MDIs on a conference call with Governors Lael Brainard and Michelle Bowman, where the MDIs' executives shared their perspectives on the effect of the COVID event on their organizations and on the communities they serve.
- During May, the Community Development Financial Institutions Research Conference was transformed into a four-part webinar series, the second of which featured academic research on MDIs and credit access for minority-owned firms. The NBA provided the practitioner perspective as a respondent. Over 130 people attended the webinar.
- In July, the NBA invited its membership to listen in on an "Ask the Fed" session on the Federal Reserve's Main Street Lending Program that was targeted to nonprofit entities.
- In September, the Federal Reserve Bank of Kansas City, in partnership with the Board and several other Reserve Banks, hosted the fifth annual forum designed to provide minority bankers with industry knowledge and development to enhance their careers and grow their professional networks. The virtual forum included discussions on economic updates and professional development as well as diversity and inclusion strategies.

International Engagement on Supervisory Policies

As a member of several international financial standard-setting bodies, the Federal Reserve actively participates in efforts to share information and advance sound supervisory policies for internationally active financial organizations and to enhance the strength, stability, and resilience of the international financial system.

Basel Committee on Banking Supervision

During 2020, the Federal Reserve contributed to supervisory policy recommendations, reports, and papers issued for consultative purposes or finalized by the Basel Committee on Banking Supervision (BCBS) that are designed to improve the supervision of banking organizations' practices and to address specific issues that emerged during the 2007–09 financial crisis and, more recently, the COVID event.[6] In 2020, significant activity at the BCBS was focused on COVID-related issues, including monitoring related risks and vulnerabilities of the global banking system.

Some examples of final BCBS documents issued in 2020 include

- *Capital treatment of securitisations of non-performing loans* (issued in November and available at https://www.bis.org/bcbs/publ/d511.htm);
- *Implementation of Basel standards—A report to G20 Leaders on implementation of the Basel III regulatory reforms* (issued in November and available at https://www.bis.org/bcbs/publ/d510.htm);
- *Sound management of risks related to money laundering and financing of terrorism: revisions to supervisory cooperation* (issued in July and available at https://www.bis.org/bcbs/publ/d505.htm);
- *Climate-related financial risks: a survey on current initiatives* (issued in April and available at https://www.bis.org/bcbs/publ/d502.htm); and
- *Progress in adopting the Principles for effective risk data aggregation and risk reporting (*issued in April and available at *https://www.bis.org/bcbs/publ/d501.htm).*

Some examples of consultative BCBS documents issued in 2020 include

- *Principles for operational resilience* (issued in August and available at https://www.bis.org/bcbs/publ/d509.htm);
- *Revisions to the principles for the sound management of operational risk* (issued in August and available at https://www.bis.org/bcbs/publ/d508.htm); and
- *Capital treatment of securitisations of non-performing loans* (issued in June and available at https://www.bis.org/bcbs/publ/d504.htm).

A comprehensive list of BCBS publications is available at https://www.bis.org/bcbs/publications.htm.

Financial Stability Board

In 2020, the Federal Reserve continued its participation in a variety of activities of the FSB, an organization whose mission is to promote international financial stability. The FSB helps coordinate the work of national financial authorities and international standard-setting bodies, and shares information on supervisory and regulatory practice. As with the Basel Committee, a significant amount of FSB work in 2020 related to monitoring vulnerabilities and sharing information on

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[6] The BCBS provides a forum for regular cooperation on banking supervisory matters. Its 45 members comprise central banks and bank supervisors from 28 jurisdictions.

COVID event-related developments. The full range of the Federal Reserve's Financial Stability Board activities is discussed in section 3, "Financial Stability."

The FSB also produces a variety of publications, including progress reports, monitoring reports, guidance, consultative documents, and compendia of better practice. Recent examples include

- *Global Transition Roadmap for LIBOR* (issued in October and available at https://www.fsb.org/wp-content/uploads/P161020-1.pdf);
- *Enhancing Cross-border Payments: Stage 3 roadmap* (issued in October and available at https://www.fsb.org/wp-content/uploads/P131020-1.pdf);
- *Regulation, Supervision and Oversight of "Global Stablecoin" Arrangements* (issued in October and available at https://www.fsb.org/wp-content/uploads/P131020-3.pdf);
- *The Use of Supervisory and Regulatory Technology by Authorities and Regulated Institutions: Market developments and financial stability implications* (issued in October and available at https://www.fsb.org/wp-content/uploads/P091020.pdf);
- *Effective Practices for Cyber Incident Response and Recovery: Final Report* (issued in October and available at https://www.fsb.org/wp-content/uploads/P191020-1.pdf);
- *2020 Status Report: Task Force on Climate-related Financial Disclosures* (issued in October and available at https://www.fsb.org/2020/10/2020-status-report-task-force-on-climate-related-financial-disclosures/);
- *Regulatory and Supervisory Issues Relating to Outsourcing and Third-Party Relationships: Discussion paper* (issued in November and available at https://www.fsb.org/2020/11/regulatory-and-supervisory-issues-relating-to-outsourcing-and-third-party-relationships-discussion-paper/);
- *Guidance on Financial Resources to Support CCP Resolution and on the Treatment of CCP Equity in Resolution* (issued in November and available at https://www.fsb.org/2020/11/guidance-on-financial-resources-to-support-ccp-resolution-and-on-the-treatment-of-ccp-equity-in-resolution/);
- *Update to G20 Leaders—COVID-19 pandemic: Financial stability impact and policy responses* (issued in November and available at https://www.fsb.org/2020/11/covid-19-pandemic-financial-stability-impact-and-policy-responses/);
- *Holistic Review of the March Market Turmoil* (issued in November and available at https://www.fsb.org/wp-content/uploads/P171120-2.pdf); and
- *OTC Derivatives Market Reforms: Note on Implementation Progress for 2020* (issued in November and available at https://www.fsb.org/wp-content/uploads/P251120.pdf).

A comprehensive list of FSB publications is available at https://www.fsb.org/publications.

Committee on Payments and Market Infrastructures

In 2020, the Federal Reserve continued its active participation in the activities of the Committee on Payments and Market Infrastructures (CPMI), a forum in which central banks promote the safety and efficiency of payment, clearing and settlement activities, and related arrangements.

The CPMI coordinated with the FSB to advance the G-20 priority to enhance global cross-border payments. In addition to contributing to the FSB's report on existing challenges (stage 1) and the final roadmap (stage 3), the CPMI identified and published a report on the building blocks (stage 2) that can help address the frictions identified in stage 1 and shape the work going forward as detailed in stage 3. The CPMI also continued its work on financial inclusion, publishing two follow-up reports to its 2016 paper "Payment Aspects of Financial Inclusion."

In addition, in conducting its work on financial market infrastructure and market-related reforms, the CPMI often coordinated with the International Organization of Securities Commissions (IOSCO). Over the course of 2020, CPMI-IOSCO continued to monitor implementation of the Principles for Financial Market Infrastructures and published an issues paper on central counterparty default management auctions.

Some examples of 2020 CPMI publications include

- *Enhancing cross-border payments: building blocks of a global roadmap* (published in July and available at https://www.bis.org/cpmi/publ/d193.pdf);
- *Payment aspects of financial inclusion: application tools* (published in September and available at https://www.bis.org/cpmi/publ/d195.pdf);
- *Payment aspects of financial inclusion in the fintech era* (published in April and available at https://www.bis.org/cpmi/publ/d191.pdf); and
- *Central counterparty default management auctions—Issues for consideration* (published in June and available at https://www.bis.org/cpmi/publ/d192.pdf).

A comprehensive list of CPMI publications is available at https://www.bis.org/cpmi_publs.

International Association of Insurance Supervisors

The Federal Reserve continued its participation in 2020 in the development of international supervisory standards for the insurance industry. The Federal Reserve participates actively in standard-setting at the International Association of Insurance Supervisors (IAIS) in consultation and collaboration with state insurance regulators, the National Association of Insurance Commissioners, and the Federal Insurance Office. The Federal Reserve's participation focuses on those aspects most relevant to financial stability and consolidated supervision.

In 2020, the IAIS focused on monitoring the impact of the COVID event on the insurance industry and facilitating discussions among supervisors. It replaced its planned yearly monitoring of the industry with more frequent and targeted monitoring. The IAIS published the results of the first part of this monitoring on its website. This analysis concluded that the insurance industry showed resilience during the crisis. Solvency ratios declined only slightly around the world from pre-pandemic levels. However, risks remained from the continued low-interest rate environment, potential for additional credit losses, and additional claims on some lines of business.

The IAIS also made progress on many other projects over the year by working remotely and increasing the use of virtual conferences. The IAIS issued several final and consultative reports in 2020.

Papers and reports:

- *Issues Paper on Use of Big Data Analytics in Insurance* (issued in February and available at https://www.iaisweb.org/page/supervisory-material/issues-papers/file/89244/issues-paper-on-use-of-big-data-analytics-in-insurance)
- *Issues Paper on the Implementation of the Recommendations of the Task Force on Climate-related Financial Disclosures* (issued in February and available at https://www.iaisweb.org/page/supervisory-material/issues-papers/file/88991/issues-paper-on-the-implementation-of-the-tcfd-recommendations)
- *Level 2 Document: ICS Version 2.0 for the Monitoring Period* (issued in March and available at https://www.iaisweb.org/page/supervisory-material/insurance-capital-standard/file/89208/level-2-document-for-ics-version-20-for-the-monitoring-period)
- *Application Paper on Liquidity Risk Management (*issued in June and available at https://www.iaisweb.org/page/supervisory-material/application-papers/file/90720/application-paper-on-liquidity-risk-management)
- *Supervisory Issues Associated with Benchmark Transition from an Insurance Perspective* (issued in July and available at https://www.iaisweb.org/page/supervisory-material/other-supervisory-papers-and-reports/file/90888/iais-report-on-supervisory-issues-associated-with-benchmark-transition-from-an-insurance-perspective)
- *Cyber Risk Underwriting Identified Challenges and Supervisory Considerations for Sustainable Market Development* (issued in December and available at https://www.iaisweb.org/page/supervisory-material/other-supervisory-papers-and-reports/file/94255/cyber-risk-underwriting-identified-challenges-and-supervisory-considerations-for-sustainable-market-development)
- *Global Insurance Market Report: Covid-19 Edition* (issued in December and available at https://www.iaisweb.org/page/supervisory-material/financial-stability/global-insurance-market-report-gimar/file/94221/iais-global-insurance-market-report-2020)

Consultative papers:

- *Draft Application Paper on the Supervision of Climate-related Risks in the Insurance Sector* (issued in October and available at https://www.iaisweb.org/page/consultations/closed-consultations/2021/application-paper-on-the-supervision-of-climate-related-risks-in-the-insurance-sector/file/92570/application-paper-on-the-supervision-of-climate-related-risks-in-the-insurance-sector)
- *Draft Definition and High-level Principles to Inform the Criteria that Will Be Used to Assess Whether the Aggregation Method Provides Comparable Outcomes to the Insurance Capital Standard* (issued in November and available at https://www.iaisweb.org/page/consultations/closed-consultations/2021/draft-definition-of-comparable-outcomes-and-high-level-principles/file/93092/public-consultation-on-the-draft-definition-of-comparable-outcomes-and-high-level-principles)
- *Public Consultation on the Development of Liquidity Metrics: Phase 1—Exposure Approach* (issued in November and available at https://www.iaisweb.org/page/consultations/closed-consultations/2021/development-of-liquidity-metrics-phae-1-exposure-approach/file/93103/pcd-on-development-of-liquidity-metrics-phase-1-exposure-approach-public)
- *Draft Application Paper on Resolution Powers and Planning* (issued in November and available at https://www.iaisweb.org/page/consultations/closed-consultations/2021/application-paper-on-the-supervision-of-climate-related-risks-in-the-insurance-sector/file/93230/application-paper-on-resolution-powers-and-planning)

Shared National Credit Program

The Shared National Credit (SNC) program is an interagency review and assessment of risk in the largest and most complex credits shared by multiple regulated financial institutions. The SNC program is governed by an interagency agreement among the Board, FDIC, and OCC. SNC reviews are completed in the first and third quarters of the calendar year. Large agent banks receive two reviews each year while most other agent banks receive a single review each year.

More information on the 2020 Shared National Credit review is available at https://www.federalreserve.gov/newsevents/pressreleases/bcreg20210225a.htm.

Bank Secrecy Act and Anti-Money Laundering Compliance

The Federal Reserve is responsible for examining institutions for compliance with the Bank Secrecy Act (BSA) and applicable anti-money laundering (AML) laws and regulations and conducts such examinations in accordance with the FFIEC's *Bank Secrecy Act/Anti-Money Laundering Examination Manual*.

The Federal Reserve is currently participating in an ongoing interagency effort to update this manual. Many of the revisions are designed to emphasize and enhance the risk-focused approach to BSA/AML supervision and to continue to provide transparency into the BSA/AML examination process.

International Coordination on Sanctions, Anti-Money Laundering, and Counter-Terrorism Financing

The Federal Reserve participates in a number of international coordination initiatives related to sanctions, money laundering, and terrorism financing. The Federal Reserve has a long-standing role in the U.S. delegation to the intergovernmental Financial Action Task Force and its working groups, contributing a banking supervisory perspective to the formulation of international standards. The Federal Reserve participated in the work of the FSB that resulted in the publication of a roadmap to enhance cross-border payments in October 2020.

The Federal Reserve also continues to participate in committees and subcommittees through the Bank for International Settlements. Specifically, the Federal Reserve actively participates in the AML Experts Group under the BCBS that focuses on AML and countering financing of terrorism (CFT) issues and assisted in amending, in July 2020, a BCBS publication on the sound management of risks related to money laundering and financing of terrorism, to introduce guidelines on cooperation and information exchange among prudential and AML/CFT supervisors for banks. In addition, the Federal Reserve participated in meetings and roundtables during the year to discuss BSA/AML issues with foreign delegations from Mexico and the United Kingdom. These dialogues are designed to promote information sharing and understanding of BSA/AML issues between U.S. and country-specific financial sectors.

Role of Supervisory Guidance

On November 5, 2020, the Federal Reserve Board and the other federal financial regulatory agencies invited comment on a proposal that would codify, with amendments, a statement issued in September 2018 confirming the role of supervisory guidance.[7] The statement explained that unlike a law or regulation, supervisory guidance does not have the force and effect of law. Accordingly, the statement also clarified that examiners will not criticize a financial institution for a "violation" of supervisory guidance as they would for a violation of a law or regulation.

The Federal Reserve has taken additional steps since issuance of the statement that further align with its objectives. For instance, staff has conducted additional examiner training, more closely reviewed draft supervisory communications to institutions, and coordinated with other banking

[7] See proposed rule on the "Role of Supervisory Guidance," available at https://www.federalregister.gov/documents/2020/11/05/2020-24484/role-of-supervisory-guidance. See also final rule on the "Role of Supervisory Guidance," available at https://www.federalregister.gov/documents/2021/04/08/2021-07146/role-of-supervisory-guidance.

agencies on guidance-related practices. The Federal Reserve remains committed to ensuring the proper role of guidance in the supervisory process.

Regulatory Reports

The Federal Reserve, along with the other member FFIEC agencies, requires banking organizations to periodically submit reports that provide information about their financial condition and structure.

Federal Reserve Regulatory Reports

The Federal Reserve requires that U.S. holding companies periodically submit reports that provide information about their financial condition and structure.[8] This information is essential to formulating and conducting financial institution regulation and supervision. It is also used to respond to information requests by Congress and the public about holding companies and their nonbank subsidiaries. Foreign banking organizations and other entities also are required to periodically submit reports to the Federal Reserve. For more information on the various reporting forms, see https://www.federalreserve.gov/apps/reportforms/default.aspx.

Effective during 2020, the following regulatory reporting forms had substantive revisions:

- **Consolidated Financial Statements for Holding Companies (FR Y-9C)**
  - implemented instructions and report form revisions pertaining to capital simplification, the community bank leverage ratio (CBLR), rules to modify regulations for large banking organizations to more closely align with measures of their risk, high volatility commercial real estate (HVCRE), operating lease liabilities, and the standardized approach for counterparty credit risk (SA-CCR);
  - revised reporting instructions related to interim final rules issued in response to the COVID event that included a three-to-five year CECL transition provision, a revised definition of "eligible retained income," changes to the CBLR qualifying criteria, provisions for the early adoption of SA-CCR, a specific capital treatment for Paycheck Protection Program (PPP) loans, and a specific capital treatment for participation in the Money Market Liquidity Facility and Paycheck Protection Program Liquidity Facility (MMLF and PPPLF);
  - added four new data items related to PPP loans and PPPLF activity;
  - consistent with section 4013 of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), updated reporting instructions related to troubled debt restructurings and added two new items to capture the volume and amount outstanding of modified loans;
  - updated instructions consistent with the changes to the definition of savings deposits in the Board's Regulation D;

[8] Holding companies are defined as BHCs, intermediate holding companies (IHCs), SLHCs, and securities holding companies.

- updated instructions and added 11 new line items related to the stress capital buffer for holding companies subject to the capital plan rule;
- clarified the reporting of shared fees for securities and insurance activities and the reporting of pledged non-trading equity securities; and
- revised reporting instructions related to the Board's interim final rule that provides temporary relief for certain community banking organizations related to certain regulations and reporting requirements as a result, in large part, of their growth in size from the coronavirus response (the Temporary Asset Thresholds interim final rule).[9]

- **Statements of Foreign Subsidiaries of U.S. Banks (FR 2314/2314S); Reports of Foreign Banking Organizations (FR Y-7N/FR Y-7NS); Statements of U.S. Nonbank Subsidiaries of U.S. Holding Companies (FR Y-11/FR Y-11S)**—provided temporary changes associated with the Temporary Asset Thresholds interim final rule, beginning with the annual FR 2314/FR 2314S, FR Y-7N/FR Y-7NS, and FR Y-11/FR Y-11S respondents for the December 31, 2020, report date, which allows for the use of the lesser of total assets as of December 31, 2019, or the most recent applicable measurement period to determine the applicability of asset-based filing thresholds for December 31, 2020, through the end of 2021.
- **Consolidated Holding Company Report of Equity Investments in Nonfinancial Companies (FR Y-12)**—implemented new items and revisions to align the form and instructions with Accounting Standards Update 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities."
- **Capital Assessments and Stress Testing Information Collection Q&As Reports (FR Y-14)**—implemented revisions to (1) collect items necessary to comply with the stress capital buffer requirement; (2) temporarily capture data pertaining to certain aspects of the CARES Act, including information on firm activity associated with various Federal Reserve lending facilities, and information regarding emerging risks arising from the COVID event; (3) address questions related to the reporting of certain CECL and capital data; (4) require firms to submit data necessary for the Board to conduct additional analysis in connection with the resubmission of firms' capital plans; and (5) better identify risk as part of the stress tests, such as risks related to wholesale, trading, and counterparty exposures, as well as information related to capital simplifications, total loss-absorbing capacity, and SA-CCR.
- **Systemic Risk Report (FR Y-15)**—implemented revisions to the report forms and instructions in response to the enactment of EGRRCPA. These revisions included raising the reporting threshold from $50 billion to $100 billion in total consolidated assets for U.S. BHCs and covered SLHCs. In addition, foreign banking organizations with combined U.S. assets of $100 billion or more must now file newly created Schedules H through N on behalf of their U.S. intermediate holding company (IHC), if any, and their combined U.S. operations. Further, three new items were added to the memoranda section of Schedule A, two of which clarify the calculation

[9] 85 Fed. Reg. 77,345 (December 2, 2020), https://www.govinfo.gov/content/pkg/FR-2020-12-02/pdf/2020-26138.pdf.

of risk-based indicators. The third item captures total non-bank assets. The FR Y-15 forms and instructions were also revised to add trading volume items to the memoranda section of Schedule C to capture the trading of securities issued by public sector entities, other fixed income securities, listed equities, and other securities.

- **Complex Institution Liquidity Monitoring Report (FR 2052a)**—implemented certain instructional revisions to better align the reporting requirements for large banking organizations with their risk profiles and to implement a change in the agencies' liquidity regulations associated with an institution's participation in the MMLF or PPPLF.
- **Single Counterparty Credit Limits (FR 2590)**—created a new form that will allow the Board to monitor a covered company's or covered foreign entity's credit exposure to counterparties in accordance with the Board's Single-Counterparty Credit Limits rule.[10] The FR 2590 report collects general information about the covered company or covered foreign entity, including its full legal name, the amount of its capital stock and surplus, and whether it would be considered a "major covered company" or "major foreign banking organization." The report also collects descriptive information about the covered company or covered foreign entity's exposure to its top 50 counterparties and the data required to calculate its gross credit exposure, net credit exposure, and aggregate net credit exposure to those counterparties.
- **Consolidated Report of Condition and Income for Edge and Agreement Corporations (FR 2886b)**—updated instructions consistent with the changes to the definition of savings deposits in the Board's Regulation D.[11]

FFIEC Regulatory Reports

The Federal Reserve, along with the other member FFIEC agencies, requires financial institutions to submit various uniform regulatory reports.[12] This information is essential to formulating and conducting supervision and regulation and for the ongoing assessment of the overall soundness of the nation's financial system. For more information on FFIEC reporting forms, see https://www.ffiec.gov/ffiec_report_forms.htm. During 2020, revisions were made to certain FFIEC reporting forms to reflect actions taken by the member agencies to provide regulatory relief in response to the COVID event, described in "Regulatory Developments" later in this section, and certain sections of the CARES Act. The reporting also was revised to implement certain regulatory capital and other rulemakings, and the impact of accounting standards. The following FFIEC reports had substantive revisions:

- **Consolidated Reports of Condition and Income (FFIEC 031, 041, 051, collectively "Call Reports")**—implemented instructional and reporting form revisions related to simplification of the agencies' regulatory capital rule, the CBLR framework, HVCRE, SA-CCR, assets excluded

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[10] 83 Fed. Reg. 38,460 (August 6, 2018), https://www.govinfo.gov/content/pkg/FR-2018-08-06/pdf/2018-16133.pdf.

[11] 85 Fed. Reg. 23,445 (April 28, 2020), https://www.govinfo.gov/content/pkg/FR-2020-04-28/pdf/2020-09044.pdf.

[12] The law establishing the FFIEC and defining its functions requires the FFIEC to develop uniform reporting systems for federally supervised financial institutions. See 12 U.S.C. § 3305.

from regulatory capital ratios, and the tailoring of requirements for large domestic banking organizations and IHCs. Consistent with the Board's FR Y-9C report, additional data items were incorporated related to troubled debt restructurings, PPP loans, and usage of the PPPLF. In addition, data items were added to the Call Reports to reflect usage of the MMLF and assist the FDIC's deposit insurance assessment. Instructional changes included the treatment of eligible retained income, the definition of savings deposits, reporting of extensions of credit to insiders consistent with the Board's Regulation O, and transitions for the adoption of CECL and SA-CCR. Recognizing that programs to address the COVID event may cause institutions to grow temporarily in 2020 and consistent with the Temporary Asset Thresholds interim final rule, instructional revisions permitted certain institutions to report under the CBLR framework that may otherwise have been excluded due to their asset size.

- **Regulatory Capital Reporting for Institutions Subject to the Advanced Capital Adequacy Framework (FFIEC 101)**—implemented instructions and report form revisions related to the tailoring of capital requirements for large banking organizations and the exclusion of certain assets from the supplementary leverage ratio requirements for custodial banks. Member agencies also made instructional revisions related to HVCRE, SA-CCR, transitions for the adoption of CECL, and the exclusion from regulatory capital ratios of certain low-risk assets and assets resulting from participation in the MMLF or PPPLF.
- **Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks (FFIEC 002)**—added four new items and implemented revisions to the instructions related to the reporting of troubled debt restructurings under section 4013 of the CARES Act, the impact of participation in the MMLF and PPPLF on FDIC deposit insurance assessments, and the definition of savings deposits under the Board's Regulation D.

Also, in response to business disruptions related to the COVID event, the Federal Reserve and other member FFIEC agencies permitted reporting institutions to use electronic signatures to meet signing requirements.

Staff Development Programs

The Federal Reserve's staff development program supports the ongoing development of approximately 3,700 professional supervisory staff, ensuring that they have the requisite skills necessary to meet their evolving supervisory responsibilities. The Federal Reserve also provides course offerings to staff at state banking agencies. Training activities in 2020 are summarized in table 4.4.

Examiner Commissioning Program

An overview of the Federal Reserve System's Examiner Commissioning Program for assistant examiners is set forth in SR 17-6/CA 17-1, "Overview of the Federal Reserve's Supervisory Education Programs." Three examiner commissioning tracks are available: (1) community banking organization (CBO), (2) consumer compliance, and (3) large financial institutions (LFI). On average, indi-

Table 4.4. Training for supervision and regulation, 2020

Course sponsor or type	Number of enrollments		Instructional time (approximate training days)[1]	Number of course offerings
	Federal Reserve personnel	State and federal banking agency personnel		
Federal Reserve System	1,639	0	630	126
FFIEC	380	302	168	42
Rapid Response[2]	22,564	8,245	5	41

1 Training days are approximate. System courses were calculated using five days as an average, with FFIEC courses calculated using four days as an average.
2 Rapid Response is a virtual program created by the Federal Reserve System as a means of providing information on emerging topics to Federal Reserve and state bank examiners.

viduals move through a combination of in-person training, self-paced learning, virtual instruction, and on-the-job training over a period of about three to four years. Achievement is measured by completing the required course content, demonstrating on-the-job knowledge, and passing a professionally validated proficiency examination.

In 2020, 99 examiners passed the proficiency examination (42 in CBO, 22 in consumer compliance, and 35 in LFI). Proactive measures were taken to ensure minimal disruption to assistant examiner progress during the COVID event, including converting courses from in-person to virtual delivery format.

Continuing Professional Development

Throughout 2020, the Federal Reserve continued to provide supervisory staff (and in many cases, state examiners through existing partnerships with the Conference of State Banking Supervisors and FFIEC) with opportunities to maintain job knowledge after commission, get exposure to emerging concepts and practices, and expand knowledge into highly specialized supervisory topics. A number of learning and communication solutions were developed, including Rapid Response webinars, special COVID communications, self-guided learning plans on specialty topics, and other content produced for just-in-time communication to supervisory staff about pandemic-related and other emerging issues and policy guidance. Training, consultation, and materials were also provided to quickly acclimate the Supervision workforce to virtual meeting tools and best practices needed in the remote work environment.

Regulatory Developments

The Federal Reserve carries out its regulatory responsibilities by developing regulatory policy (rule-makings, supervision and regulation letters, policy statements, and guidance) and reviewing and acting on a variety of applications filed by banking organizations.

Rulemakings and Guidance

The Federal Reserve issues new regulations or revises existing regulations in response to laws enacted by Congress or because of evolving conditions in the financial marketplace. Over 2020, the Federal Reserve, working with the other federal banking agencies, announced a variety of policy actions related to addressing the economic effects of the COVID event and promoting the safety and soundness of the financial system. The Federal Reserve issued the following rules and statements in 2020 (see table 4.5).

Table 4.5. Federal Reserve or interagency rulemakings/statements (proposed and final), 2020

Date issued	Rulemaking/statement
1/30/2020	Federal Reserve finalizes rule to simplify and increase the transparency of the Board's rules for determining control of a banking organization. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200130a.htm
1/30/2020	Agencies propose changes to modify Volcker rule "covered funds" restrictions. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200130b.htm
2/6/2020	Federal Reserve Board releases hypothetical scenarios for its 2020 stress test exercises. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200206a.htm
3/4/2020	Federal Reserve Board approves rule to simplify its capital rules for large banks, preserving the strong capital requirements already in place. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200304a.htm
3/6/2020	Agencies invite comment on updates to resolution plan guidance for large foreign banks. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200306b.htm
3/9/2020	Agencies encourage financial institutions to meet financial needs of customers and members affected by coronavirus. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200309a.htm
3/12/2020	Federal and state financial regulatory agencies issue interagency statement on supervisory practices regarding financial institutions affected by tornadoes in Tennessee. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200312a.htm
3/16/2020	Federal banking agencies encourage banks to use Federal Reserve discount window. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200316a.htm
3/17/2020	Federal banking agencies provide banks additional flexibility to support households and businesses. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200317a.htm
3/22/2020	Agencies provide additional information to encourage financial institutions to work with borrowers affected by the COVID event. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200322a.htm
3/23/2020	Federal Reserve Board announces technical change to support the U.S. economy and allow banks to continue lending to creditworthy households and businesses. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200323a.htm
3/24/2020	Federal Reserve provides additional information to financial institutions on how its supervisory approach is adjusting in light of the COVID event. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200324a.htm
3/26/2020	Federal agencies encourage banks, savings associations, and credit unions to offer responsible, small-dollar loans to consumers and small businesses affected by the COVID event. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200326a.htm
3/26/2020	Federal Reserve offers regulatory reporting relief to small financial institutions affected by the COVID event. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200326b.htm
3/27/2020	Agencies announce two actions to support lending to households and business: permitting early adoption of SA-CCR, and providing an extension of the transition to CECL. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200327a.htm
3/31/2020	Federal Reserve Board announces it will delay by six months the effective date for its revised control framework. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200331a.htm
4/1/2020	Federal Reserve Board announces temporary change to its supplementary leverage ratio rule to ease strains in the Treasury market resulting from the COVID event and increase banking organizations' ability to provide credit to households and businesses. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200401a.htm
4/2/2020	Agencies will consider comments on Volcker rule modifications following expiration of comment period. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200402a.htm

(continued)

Table 4.5. Federal Reserve or interagency rulemakings/statements (proposed and final), 2020—*continued*

Date issued	Rulemaking/statement
4/3/2020	Federal agencies encourage mortgage servicers to work with struggling homeowners affected by the COVID event. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200403a.htm
4/6/2020	Agencies announce changes to the community bank leverage ratio. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200406a.htm
4/7/2020	Agencies issue revised interagency statement on loan modifications by financial institutions working with customers affected by the COVID event. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200407a.htm
4/9/2020	Federal bank regulators issue interim final rule for Paycheck Protection Program Facility. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200409a.htm
4/14/2020	Federal banking agencies to defer appraisals and evaluations for real estate transactions affected by the COVID event. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200414a.htm
4/17/2020	Federal Reserve Board announces rule change to bolster the effectiveness of the Small Business Administration's Paycheck Protection Program. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200417a.htm
4/24/2020	Federal Reserve Board announces interim final rule to delete the six-per-month limit on convenient transfers from the "savings deposit" definition in Regulation D. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200424a.htm
4/27/2020	Agencies extend comment period on updates to resolution plan guidance for large foreign banks. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200427a.htm
5/1/2020	Federal Reserve Board finalizes rule to extend by 18 months the initial compliance dates for certain parts of its single-counterparty credit limit rule. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200501a.htm
5/5/2020	Federal bank regulatory agencies modify liquidity coverage ratio for banks participating in Money Market Mutual Fund Liquidity Facility and Paycheck Protection Program Liquidity Facility. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200505a.htm
5/6/2020	Agencies extend two resolution plan deadlines. Joint Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200506a.htm
5/8/2020	Federal financial regulatory agencies issue interagency policy statement on allowances for credit losses and interagency guidance on credit risk review systems. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200508a.htm
5/15/2020	Regulators temporarily change the supplementary leverage ratio to increase banking organizations' ability to support credit to households and businesses in light of the coronavirus response. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200515a.htm
5/20/2020	Federal agencies share principles for offering responsible small-dollar loans. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200520a.htm
5/29/2020	Federal Reserve Board releases annual determination of aggregate consolidated liabilities of financial companies as required by the Dodd-Frank Act. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200529a.htm
6/2/2020	Agencies issue host state loan-to-deposit ratios. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200602a.htm
6/15/2020	Federal Reserve Board announces it will resume examination activities for all banks, after previously announcing a reduced focus on exam activity in light of the COVID event. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200615a.htm
6/23/2020	Federal and state regulatory agencies issue examiner guidance for assessing safety and soundness considering the effect of the COVID event on financial institutions. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200623a.htm
6/24/2020	Agencies release list of distressed or underserved nonmetropolitan middle-income geographies. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200624a.htm
6/25/2020	Financial regulators modify Volcker rule. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200625a.htm
6/25/2020	Agencies finalize amendments to swap margin rule. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200625b.htm
6/25/2020	Federal Reserve Board releases results of stress tests for 2020 and additional sensitivity analyses conducted in light of the COVID event. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200625c.htm
6/26/2020	Agencies release proposed revisions to interagency questions and answers regarding flood insurance. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200626a.htm

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Table 4.5. Federal Reserve or interagency rulemakings/statements (proposed and final), 2020—*continued*

Date issued	Rulemaking/statement
6/29/2020	Federal Reserve Board announces that it is seeking individuals to serve on its Insurance Policy Advisory Committee (IPAC). Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200629a.htm
7/1/2020	Agencies provide largest firms with information for next resolution plans. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200701a.htm
7/15/2020	Federal Reserve Board announces extension of rule change to bolster effectiveness of the Small Business Administration's Paycheck Protection Program. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200715a.htm
7/24/2020	Federal Reserve Board finalizes rule that implements technical, clarifying updates to Freedom of Information Act procedures and changes to rules for the disclosure of confidential supervisory information. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200724a.htm
8/10/2020	Federal Reserve Board announces individual large bank capital requirements, which will be effective on October 1. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200810a.htm
8/13/2020	Federal banking agencies issue joint statement on enforcement of Bank Secrecy Act/Anti-Money Laundering requirements. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200813a.htm
8/21/2020	Agencies issue statement providing additional information for certain Bank Secrecy Act due diligence requirements. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200821a.htm
8/26/2020	Agencies issue three final rules: a final rule that temporarily modifies the community bank leverage ratio, as required by the CARES Act; a final rule that makes more gradual, as intended, the automatic restrictions on distributions if a banking organization's capital levels decline below certain levels; and a final rule that allows institutions that adopt the current expected credit losses (CECL) accounting standard in 2020 to mitigate the estimated effects of CECL on regulatory capital for two years. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200826a.htm
9/1/2020	Federal and state financial regulatory agencies issue interagency statement on supervisory practices regarding financial institutions affected by Hurricane Laura and California wildfires. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200901b.htm
9/1/2020	Agencies extend comment period on proposed revisions to interagency questions and answers regarding flood insurance. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200901a.htm
9/4/2020	Federal Reserve Board releases corrected stress test results stemming from an error in projected trading losses and as a result, revised the capital requirements for two banks. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200904a.htm
9/17/2020	Federal Reserve Board releases hypothetical scenarios for second round of bank stress tests. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200917a.htm
9/21/2020	Federal Reserve Board issues Advance Notice of Proposed Rulemaking on an approach to modernize regulations that implement the Community Reinvestment Act (CRA). Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200921a.htm
9/29/2020	Agencies issue two final rules: a final rule that temporarily defers appraisal and evaluation requirements, and a final rule that neutralizes the regulatory capital and liquidity effects for banks that participate in certain Federal Reserve liquidity facilities. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200929a.htm
9/30/2020	Federal Reserve Board invites public comment on proposal that would update the Board's capital planning requirements to be consistent with other Board rules that were recently modified. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200930a.htm
9/30/2020	Federal Reserve Board announces it will extend for an additional quarter several measures to ensure that large banks maintain a high level of capital resilience. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200930b.htm
10/20/2020	Agencies finalize rule to reduce the impact of large bank failures. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201020a.htm
10/20/2020	Agencies issue final net stable funding ratio rule. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201020b.htm
10/23/2020	Agencies invite comment on proposed rule under Bank Secrecy Act. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201023a.htm
10/29/2020	Agencies propose regulation on the role of supervisory guidance. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201029a.htm
10/30/2020	Agencies release paper on operational resilience. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201030a.htm
11/18/2020	Agencies announce threshold for smaller loan exemption from appraisal requirements for higher-priced mortgage loans. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201118a.htm

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Table 4.5. Federal Reserve or interagency rulemakings/statements (proposed and final), 2020—*continued*

Date issued	Rulemaking/statement
11/18/2020	Agencies announce dollar thresholds in Regulations Z and M for exempt consumer credit and lease transactions. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201118b.htm
11/19/2020	Federal Reserve Board issues final rule modifying the annual assessment fees for its supervision and regulation of large financial companies. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201119a.htm
11/19/2020	Agencies release fact sheet to clarify Bank Secrecy Act due diligence requirements for banks and credit unions that offer services to charities and nonprofits. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201119b.htm
11/20/2020	Agencies provide temporary relief to community banking organizations. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201120a.htm
11/30/2020	Agencies issue statement on LIBOR transition. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201130a.htm
11/30/2020	Federal Reserve Board welcomes and supports release of proposal and supervisory statements that would enable clear end date for U.S. Dollar LIBOR and would promote the safety and soundness of the financial system. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201130b.htm
12/3/2020	Federal Reserve Board announces members of its IPAC. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201203a.htm
12/7/2020	Federal Reserve Board announces annual indexing of reserve requirement exemption amount and of low reserve tranche for 2021. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201207a.htm
12/9/2020	Agencies announce several resolution plan actions. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201209a.htm
12/17/2020	Agencies release annual CRA asset-size threshold adjustments for small and intermediate small institutions. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201217a.htm
12/18/2020	Agencies propose requirement for computer security incident notification. Joint press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201218a.htm
12/18/2020	Federal Reserve Board releases second round of bank stress test results. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201218b.htm
12/18/2020	Federal Reserve Board votes to affirm the Countercyclical Capital Buffer at the current level of 0 percent. Press release: https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201218c.htm

Banking Applications

The Federal Reserve reviews applications submitted by bank holding companies, state member banks, savings and loan holding companies, foreign banking organizations, and other entities for approval to undertake various transactions and to engage in new activities. In 2020, the Federal Reserve acted on 824 applications filed under the six relevant statutes.

The Federal Reserve published the *Semiannual Report on Banking Applications Activity*, which provides aggregate information on proposals filed by banking organizations and reviewed by the Federal Reserve. The current report as well as historical reports are available at https://www.federalreserve.gov/publications/semiannual-report-on-banking-applications-activity.htm.

Public Notice of Federal Reserve Decisions and Filings Received

The Board's website provides information on orders and announcements (https://www.federalreserve.gov/newsevents/pressreleases.htm) as well as a guide for U.S. and foreign banking organizations that wish to submit applications (https://www.federalreserve.gov/bankinforeg/afi/afi.htm).

5 | Payment System and Reserve Bank Oversight

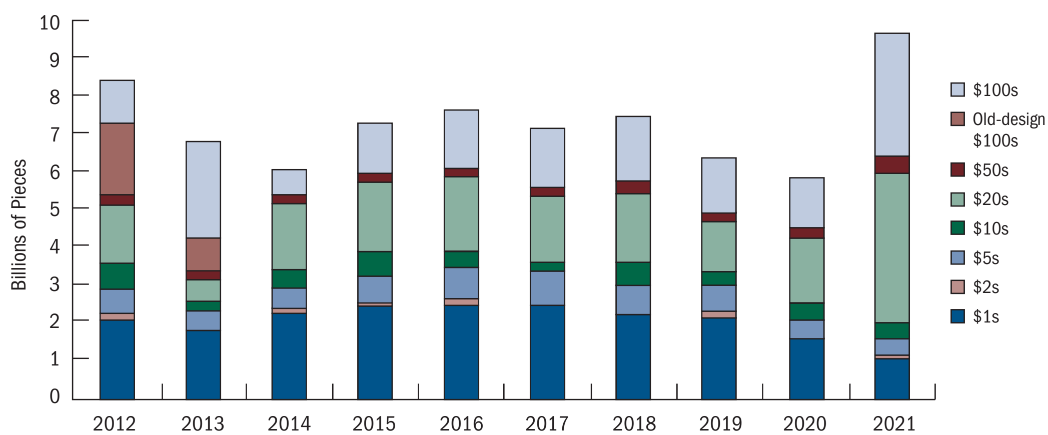
The Federal Reserve performs key functions to maintain the integrity of the U.S. payment and settlement system. These functions help keep cash, check, and electronic transactions moving reliably through the U.S. economy on behalf of households and businesses and the U.S. Treasury.

This section discusses the key payment system and Reserve Bank oversight activities undertaken by the Federal Reserve during 2020:

- providing payment services to depository and certain other institutions
- distributing the nation's currency and coin to depository institutions (also see figure 5.1)
- serving as fiscal agents and depositories for the U.S. government and other entities
- serving as a catalyst for payment system improvements
- conducting Reserve Bank oversight to ensure effective internal controls, operations, and management

Figure 5.1. The Federal Reserve experiences unprecedented demand for currency during the COVID-19 pandemic

During 2020, the Board monitored trends and revised the Federal Reserve note production order to meet demands for currency from domestic and international customers. This demand is reflected in the 2021 print order. For more information, see https://www.federalreserve.gov/paymentsystems/coin_currency_orders.htm.



Note: In April 2020, the Board revised the FY 2020 order from 5.2 billion to 6.2 billion notes to meet increased demand for currency due to the COVID-19 pandemic. In collaboration with the Bureau of Engraving and Printing (BEP), the print order was revised a second time on August 3 to 5.8 billion notes with a change in denominational blend to better meet the needs of commerce. These changes allowed the BEP to maximize production capacity on the highest priority denominations.

Payment Services to Depository and Other Institutions

Reserve Banks provide a range of payment and related services to depository and certain other institutions; these "priced services" include collecting checks, operating an automated clearinghouse (ACH) service, transferring funds and securities, and providing a multilateral settlement service (see box 5.1).[1]

Commercial Check-Collection Service

The commercial check-collection service provides a suite of electronic and paper processing options for forward and return collections.

In 2020, the Reserve Banks recovered 103.2 percent of the total costs of their commercial check-collection service, including the related private-sector adjustment factor (PSAF) (see box 5.1). Revenue from operations totaled $113.9 million, resulting in net income of $4.8 million. The Reserve Banks' operating expenses and imputed costs totaled $109.4 million. Reserve Banks handled 3.8 billion checks in 2020, a decrease of 14.2 percent from 2019 (see table 5.1). The average daily value of checks collected by the Reserve Banks in 2020 was approximately $30.8 billion, a decrease of 7.2 percent from the previous year.

Table 5.1. Activity in Federal Reserve priced services, 2018–20
Thousands of items, except as noted

Service	2020	2019	2018	Percent change	
				2019–20	2018–19
Commercial check	3,766,523	4,389,011	4,739,534	-14.2	-7.4
Commercial ACH	16,548,795	15,583,792	14,691,615	6.2	6.1
Fedwire funds transfer	184,010	172,435	162,980	9.8	5.8
National settlement	551	558	579	-1.2	-3.7
Fedwire securities	4,600	3,246	3,510	41.7	-7.5

Note: Activity in commercial check is the total number of commercial checks collected, including processed and fine-sort items; in commercial ACH, the total number of commercial items processed; in Fedwire funds transfer and securities transfer, the number of transactions originated online and offline; and in national settlement, the number of settlement entries processed.

Commercial Automated Clearinghouse Service

The commercial ACH service provides domestic and cross-border batched payment options for same-day and next-day settlement.

[1] *Depository institutions* are defined as commercial banks, thrifts, and credit unions. Besides playing an important role in the broader economy by providing transaction accounts, such as checking accounts, to consumers, households, and businesses, these institutions play an important role in the Federal Reserve System's payment and settlement system function.

The ACH enables depository institutions and their customers to process large volumes of payments through electronic batch processes.

Box 5.1. Cost Recovery Requirements

The Federal Reserve must (under the Monetary Control Act of 1980) establish fees for "priced services" to recover, over the long run, all the direct and indirect costs associated with its payment and settlement system service. Costs include those actually incurred as well as the imputed costs that would have been incurred—including financing costs, taxes, and certain other expenses—and the return on equity (profit) that would have been earned if a private business firm had provided the services.[1] The imputed costs and imputed profit are collectively referred to as the private-sector adjustment factor (PSAF).

From 2011 through 2020, the Reserve Banks recovered 103.5 percent of the total priced services costs, including the PSAF (see table A). In 2020, Reserve Banks recovered 101.6 percent of the total priced services costs, including the PSAF (see table A). The Reserve Banks' operating expenses and imputed costs totaled $434.0 million. Revenue from operations totaled $446.9 million, resulting in net income from priced services of $13.0 million. The Check Services, the Fedwire® Funds and National Settlement Services, and the Fedwire Securities Service achieved full cost recovery. The FedACH® Service, however, did not achieve full cost recovery because of investment costs associated with the multi-year technology initiative to modernize its processing platform, which was recently implemented.

Table A. Priced services cost recovery, 2011–20
Millions of dollars, except as noted

Year	Revenue from services[1]	Operating expenses and imputed costs[2]	Targeted return on equity[3]	Total costs	Cost recovery (percent)[4]
2011	478.6	444.4	16.8	461.2	103.8
2012	449.8	423.0	8.9	432.0	104.1
2013	441.3	409.3	4.2	413.5	106.7
2014	433.1	418.7	5.5	424.1	102.1
2015	429.1	397.8	5.6	403.4	106.4
2016	434.1	410.5	4.1	414.7	104.7
2017	441.6	419.4	4.6	424.0	104.1
2018	442.5	428.1	5.2	433.3	102.1
2019	444.0	441.2	5.4	446.5	99.4
2020	446.9	434.0	5.9	439.9	101.6
2011–20	4,441.2	4,226.4	66.3	4,292.7	103.5

Note: Here and elsewhere in this section, components may not sum to totals or yield percentages shown because of rounding. Excludes amounts related to development of the FedNow Service.

1 For the 10-year period, includes revenue from services of $4,438.1 million and other income and expense (net) of $3.1 million.

2 For the 10-year period, includes operating expenses of $4,094.6 million, imputed costs of $44.1 million, and imputed income taxes of $87.7 million.

3 From 2011 to 2012, the PSAF was adjusted to reflect the actual clearing balance levels maintained; previously, the PSAF had been calculated based on a projection of clearing balance levels.

4 Revenue from services divided by total costs. For the 10-year period, cost recovery is 95.6 percent, including the effect of accumulated other comprehensive income (AOCI) reported by the priced services under ASC 715. For details on changes to the estimation of priced services AOCI and their effect on the pro forma financial statements, refer to note 3 to the "Pro Forma Financial Statements for Federal Reserve Priced Services" at the end of this section.

1 According to the Accounting Standards Codification (ASC) Topic 715 (ASC 715), Compensation-Retirement Benefits, the Reserve Banks recognized a $630.7 million reduction in equity related to the priced services' benefit plans through 2020. Including this reduction in equity, which represents a decline in economic value, results in cost recovery of 95.6 percent for the 10-year period. For details on how implementing ASC 715 affected the pro forma financial statements, refer to note 3 to the pro forma financial statements at the end of this section.

In 2020, the Reserve Banks recovered 97.5 percent of the total costs of their commercial ACH services, including the related PSAF. Revenue from operations totaled $159.1 million, resulting in a net loss of $2.1 million. The FedACH® Service did not achieve full cost recovery because of investment costs associated with the multiyear technology initiative to modernize its processing platform, which was recently implemented. The Reserve Banks' operating expenses and imputed costs totaled $161.5 million. The Reserve Banks processed 16.5 billion commercial ACH transactions in 2020, an increase of 6.2 percent from 2019 (see table 5.1). The average daily value of FedACH transfers in 2020 was approximately $122.8 billion, an increase of 9.8 percent from the previous year.

FedNow℠ Service

The FedNow Service is a new real-time gross settlement service that will support nationwide access to instant payments. The Federal Reserve's provision of the FedNow Service will provide core infrastructure to promote ubiquitous, safe, and efficient instant payments in the United States. The development of the FedNow Service is a high priority of the Federal Reserve.

On August 11, 2020, the Federal Reserve published a *Federal Register* notice on the FedNow Service's features and functionality.[2] The features and functionality described in the notice represented a key milestone in the FedNow Service's development and were based on input received from the public in response to the Board's 2019 request for comment.[3] The build of the core FedNow Service began in 2020 with a technology strategy that blends Federal Reserve resources and external vendors and assesses opportunities to leverage emerging technologies. In addition, the Reserve Banks began work to implement a pilot program in early 2021 to gather input from a wide range of financial institutions and service providers, connection types, settlement arrangements, and experience levels. The pilot program will help the Federal Reserve further define the service and industry readiness strategies, as well as help with testing of the service before general availability.

The FedNow Service will launch in 2023 and will be deployed in phases so that the initial service can be launched expeditiously with additional features and enhancements released in stages after the initial launch. This phased approach will allow for adjustments and improvements in response to industry needs or changes in technology. As the Federal Reserve finalizes the service implementation timeline, information for depository institutions will be available through existing Federal Reserve Bank communication channels.

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[2] Service Details on Federal Reserve Actions to Support Interbank Settlement of Instant Payments, 85 Fed. Reg. 48,522 (September 10, 2020).

[3] Federal Reserve Actions to Support Interbank Settlement of Faster Payments, 84 Fed. Reg. 39,297 (August 9, 2019).

Fedwire Funds and National Settlement Services

In 2020, the Reserve Banks recovered 105.3 percent of their costs of the Fedwire Funds and National Settlement Service, including the related PSAF. Revenue from operations totaled $144.4 million, resulting in a net income of $9.6 million. The Reserve Banks' operating expenses and imputed costs totaled $135.0 million in 2020.

Fedwire Funds Service

The Fedwire Funds Service allows its participants to send or receive domestic time-critical payments using their balances at Reserve Banks to transfer funds in real time.

From 2019 to 2020, the number of Fedwire funds transfers originated by depository institutions increased 9.8 percent, to approximately 184 million (see table 5.1). The average daily value of Fedwire funds transfers in 2020 was $3.3 trillion, an increase of 19.8 percent from the previous year.

National Settlement Service

The National Settlement Service is a multilateral settlement system that allows participants in private-sector clearing arrangements to settle transactions using their balances at Reserve Banks.

In 2020, the service processed settlement files for 11 local and national private-sector arrangements. The Reserve Banks processed 9,468 files that contained about 551,000 settlement entries (see table 5.1). Settlement file activity in 2020 decreased 2.1 percent from 2019, and settlement entries decreased 1.2 percent. The total value of settlement processed by NSS increased 7.9 percent, to $23.5 trillion.

Fedwire Securities Service

The Fedwire Securities Service allows its participants to transfer electronically to other service participants certain securities issued by the U.S. Department of the Treasury, federal government agencies, government-sponsored enterprises, and certain international organizations.[4]

In 2020, the Reserve Banks recovered 101.1 percent of the costs of their Fedwire Securities Service, including the related PSAF. Revenue from operations totaled approximately $28.8 million, resulting in a net income of $0.7 million. The Reserve Banks' operating expenses and imputed costs totaled $28.1 million in 2020. In 2020, the number of non-Treasury securities transfers processed via the service increased approximately 41.7 percent from 2019, to approximately 4.6 mil-

[4] The expenses, revenues, volumes, and fees reported here are for transfers of securities issued by federal government agencies, government-sponsored enterprises, and certain international organizations. Reserve Banks provide Treasury securities services in their role as Treasury's fiscal agent. These services are not considered priced services. For details, see "Financing and Securities Services" later in this section.

lion (see table 5.1). The average daily value of Fedwire Securities priced-service transfers in 2020 was approximately $86.7 billion, an increase of 4.1 percent from the previous year.[5] The average daily value of Fedwire Securities transfers in 2020 was more than $1.4 trillion, an increase of approximately 3.8 percent from the previous year.

FedLine Solutions: Access to Reserve Bank Services

The Reserve Banks' FedLine Solutions provide depository institutions with a variety of connections for accessing the Reserve Banks' payment and information services.

For priced services, the Reserve Banks charge fees for these connections and allocate the associated costs and revenue to the various services. There are currently six FedLine Solutions through which customers can access the Reserve Banks' priced services: FedMail, FedLine Exchange, FedLine Web, FedLine Advantage, FedLine Command, and FedLine Direct. These FedLine Solutions are designed to meet the individual connectivity, security, and contingency requirements of depository institution customers.

The Reserve Banks continue to focus on increased resiliency and availability of the FedLine Solutions. In 2020, the Reserve Banks advanced the safety and security of FedLine Solutions by making progress on key infrastructure upgrades and network modernization, as well as through proactive monitoring of an evolving threat environment and by strengthening endpoint security policies.

Federal Reserve Intraday Credit

The Federal Reserve Board governs the use of Federal Reserve Bank intraday credit, also known as daylight overdrafts.[6] A daylight overdraft occurs when an institution's account activity creates a negative balance in the institution's Federal Reserve account at any time in the operating day. Daylight overdrafts enable an institution to send payments more freely throughout the day than if it were limited strictly by its available intraday funds balance, increasing efficiency and reducing payment system risk.

Institutions currently hold historically high levels of overnight balances at the Federal Reserve Banks, while daylight overdrafts remained historically low, as shown in figure 5.2.[7]

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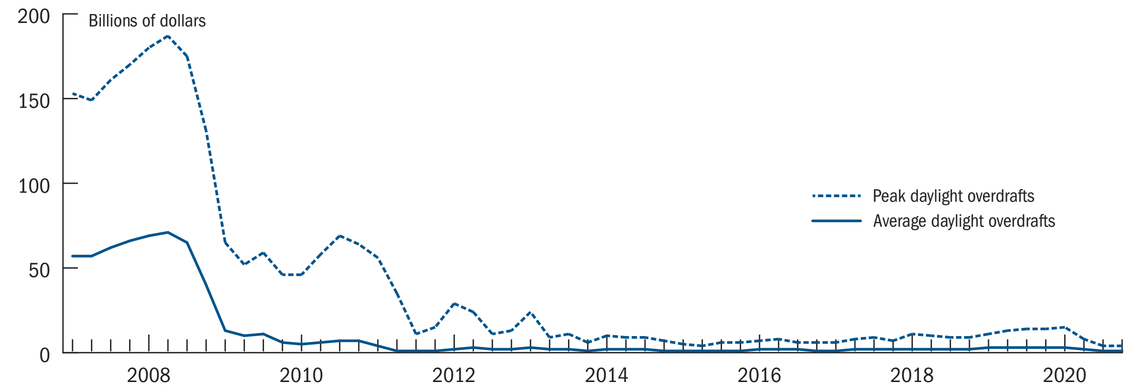
[5] These values do not include reversals.

[6] See the Payment System Risk policy: https://www.federalreserve.gov/paymentsystems/psr_about.htm. The Payment System Risk policy recognizes explicitly the role of the central bank in providing intraday balances and credit to healthy institutions; under the policy, the Reserve Banks provide collateralized intraday credit at no cost.

[7] Before the 2007–09 financial crisis, overnight balances were much lower and daylight overdrafts significantly higher than levels observed since late 2008. Increases in the overnight balances institutions held at the Reserve Banks have decreased the demand for intraday credit, and is expected to remain low given the FOMC's decision to continue to implement monetary policy within a regime of ample reserves.

Figure 5.2. Aggregate daylight overdrafts 2007–20



Source: PDR data, PubWeb quarterly PSR data.

Fees collected for daylight overdrafts are also at historically low levels.[8] Fees as well as the use of intraday credit are expected to remain relatively low given the historically high levels of overnight balances under the ample reserves regime. Additionally, a 2011 policy revision that eliminated fees for collateralized daylight overdrafts has further contributed to the decrease in fees.

Currency and Coin

The Federal Reserve Board issues the nation's currency (in the form of Federal Reserve notes) to 28 Federal Reserve Bank offices. The Reserve Banks, in turn, distribute Federal Reserve notes to depository institutions in response to public demand. Together, the Board and Reserve Banks work to maintain the integrity of and confidence in Federal Reserve notes.

In 2020, the Board paid $783.4 million to the Treasury's Bureau of Engraving and Printing (BEP) for costs associated with the production of 6.4 billion Federal Reserve notes. The volume of Federal Reserve notes issued and outstanding at year-end 2020 totaled 50.3 billion pieces, a 12.2 percent increase from 2019. About 41 percent of this growth was attributable to growth in demand for $20 notes, and an additional 38.9 percent was attributable to growth in demand for $100 notes. In 2020, the Reserve Banks distributed 33.5 billion Federal Reserve notes into circulation, a 6.1 percent decrease from 2019, and received 28.1 billion Federal Reserve notes from circulation, a 17.9 percent decrease from 2019. While there were decreases in both payments and receipts in 2020, the significantly larger decrease in receipts than payments resulted in a net

[8] In light of disruptions from the coronavirus pandemic, the Board took temporary actions to increase the availability of intraday credit extended by Reserve Banks. Specifically, the Board temporarily (1) suspended net debit caps for primary credit institutions, (2) authorized a streamlined procedure for secondary credit institutions to request collateralized intraday credit under the max cap program, and (3) suspended two collections of information that are used to calculate net debit caps.

payments increase of 3.9 billion notes, or a 258.4 percent increase from 2019. This increase is from the high demand for currency resulting from the COVID-19 pandemic. The $20 through $100 denominations experienced greater increases in demand than the lower denominations of $1 through $10 notes.

The value of Federal Reserve notes issued and outstanding at year-end 2020 totaled $2,040.7 billion, a 16.0 percent increase from 2019. The year-over-year increase is attributable largely to demand for $100 notes. The Board estimates that at least one-half of the value of Federal Reserve notes in circulation is held abroad, mainly as a store of value.

The Reserve Banks also distribute coin to depository institutions on behalf of the U.S. Mint.[9] In 2020, Reserve Banks distributed 51.9 billion coins into circulation, a 24.1 percent decrease from 2019, and received 34.0 billion coins from circulation, a 39.4 percent decrease from 2019. The year-over-year decrease in coin activity is a result of the COVID-19 pandemic, which significantly disrupted the supply chain and normal circulation patterns for U.S. coins.

Fiscal Agency and Government Depository Services

The Federal Reserve Banks, upon the direction of the Secretary of the Treasury, act as fiscal agents of the U.S. government.[10] The Reserve Banks, in their role as fiscal agents, provide services such as payment services, financing and securities services, and financial accounting and reporting services, as well as maintain the Treasury's operating cash account.

To support further the Treasury's mission, the Reserve Banks develop, operate, and maintain a number of automated systems and provide associated technology infrastructure services. The Reserve Banks also provide certain fiscal agency and depository services to other entities.

In 2020, the Reserve Banks, as fiscal agents, supported the Treasury's implementation of multiple fiscal policy efforts in response to the COVID-19 pandemic. The Reserve Banks, as payment system operator, processed and settled approximately 237 million ACH payments and cleared and settled approximately 39.2 million checks associated with the first two rounds of Economic Impact Payments (commonly referred to as stimulus checks). The Reserve Banks also processed unemployment benefit payments and auctioned Treasury securities to meet Treasury funding needs.

Reserve Bank expenses for providing fiscal agency and depository services totaled $732.4 million, an increase of $3.4 million, or 0.5 percent (see table 5.2). The Treasury and other entities

[9] The Federal Reserve Board is the issuing authority for Federal Reserve notes, while the U.S. Mint, a bureau of the U.S. Treasury, is the issuing authority for coin.

[10] In accordance with section 15 of the Federal Reserve Act. See https://www.federalreserve.gov/aboutthefed/section15.htm.

Table 5.2. Expenses of the Federal Reserve Banks for fiscal agency and depository services, 2018–20
Thousands of dollars[1]

Agency and service	2020	2019	2018
Department of the Treasury			
Payment services	293,994	292,078	299,619
Financing and Treasury securities services	179,314	191,614	168,387
Financial accounting and reporting services	69,315	65,105	62,985
Technology infrastructure services[2]	150,461	139,703	135,660
Total, Treasury	693,084	688,500	666,651
Other entities	39,321	40,471	39,344
Total reimbursable expenses	**732,406**	**728,971**	**705,995**

[1] Service costs include reimbursable pension costs, where applicable. Previous versions of the *Annual Report* provided a separate line item for pension expenses.
[2] These costs include the development and support costs of Treasury technology infrastructure.

reimburse the Reserve Banks for the expense of providing fiscal agency and depository services. Support for Treasury programs accounted for 94.6 percent of expenses, and support for other entities accounted for the remaining 5.4 percent.

Payment Services

The Reserve Banks support the Treasury's payment services by developing, operating, and maintaining electronic systems that allow the public to receive payments from and authorize payments to federal agencies, as well as by providing operational and customer support.

The Reserve Banks process payments, such as federal payroll, Social Security benefits, and veterans' benefits, from the Treasury's account at the Federal Reserve and process payments made to the Treasury's account at the Federal Reserve, which include collections such as fees and debts owed to the federal government.

In 2020, the Reserve Banks worked with the Treasury to develop modernized business processes and applications to improve federal payments. The Reserve Banks also continued to support the Treasury's efforts to modernize electronic tax collection.

Reserve Bank expenses for providing Treasury payment services were $294.0 million in 2020, an increase of $1.9 million, or 0.7 percent. The programs that contributed most to Reserve Bank expenses in 2020 were the Stored Value Card program, the Pay.gov program, and the Invoice Processing Platform program.

The Reserve Banks work with the Treasury to support the Stored Value Card program, which comprises three military cash-management services: EagleCash, EZPay, and Navy Cash. These programs provide electronic payment methods for goods and services on military bases and Navy ships. Stored-value cards are in use on more than 80 military bases and installations in 19 countries (including the United States) and on board more than 135 ships. In 2020, the Reserve Banks continued to provide operations and customer support, replaced legacy equipment, and developed new functionality and capability for stored-value cards.

The Reserve Banks also work with the Treasury to expand the use of electronic payment services for payments made to the Treasury's account at the Federal Reserve. The Reserve Banks operate and maintain Pay.gov, an application that allows the public to use the internet to initiate and authorize payments to the federal government using a U.S.-held bank account (through ACH Debit), a credit or debit card, or a digital wallet through services such as PayPal or Amazon Pay. In 2020, Pay.gov processed 116.2 million online payments valued at $196.3 billion. In addition, the Reserve Banks operated applications and worked with the Treasury to support the movement of $59.0 billion in commercial deposits to the Treasury's account at the Federal Reserve and processed and settled 173 million electronic payment transactions valued at $649.0 billion.

The Reserve Banks also work with the Treasury to support outreach, implementation, development, operations, and maintenance of the Invoice Processing Platform, which provides one integrated, secure system to simplify the management of vendor invoices.[11] In 2020, the Invoice Processing Platform program continued to make enhancements and onboard additional federal agencies and vendors. As more organizations worked remotely in 2020, the Treasury received additional requests to onboard agencies and vendors to the program.

Financing and Securities Services

The Reserve Banks work closely with the Treasury in support of the financing needed to operate the federal government, which includes forecasting, scheduling, auctioning, issuing, settling, maintaining, and redeeming marketable Treasury securities (for example, bills, notes, and bonds). The Reserve Banks also support the Treasury's efforts to encourage savings by issuing, maintaining, and redeeming U.S. savings bonds, as well as providing fulfillment services. The Reserve Banks provide customer service and operate the automated systems that support marketable Treasury securities and U.S. savings bonds.

In 2020, the Reserve Banks supported record Treasury auction activity in part to support the government's fiscal response to the COVID-19 pandemic. The Reserve Banks, in partnership with the Treasury, conducted a record 503 auctions, an increase of 178 auctions, or 54.8 percent, over the previous record of 325 in 2019. Auction activity enabled the Treasury's awarding a record $19.7 trillion in wholesale Treasury marketable securities to investors, an increase of $8.0 trillion, or 67.8 percent, over the previous record of $11.7 trillion awarded in 2019. The Reserve Banks

[11] Additional information can be accessed at https://www.ipp.gov/about-ipp/index.

also supported the issuance and servicing of $98.1 billion in savings bonds and marketable securities, which are held in the TreasuryDirect system and partnered with the Treasury to introduce the 20-year Treasury bond.

Reserve Bank expenses for financing and securities services were $179.3 million in 2020, a decrease of $12.3 million, or 6.4 percent, primarily attributable to a change in approach to modernizing an application.

Accounting and Reporting Services

The Reserve Banks support the Treasury's accounting and reporting functions by forecasting, monitoring, and managing the government's overall cash requirements, cash flow, and government-wide accounting services. The Reserve Banks also support the Treasury's publication of the daily and monthly Treasury statements; the Combined Statement of Receipts, Outlays, and Balances of the United States Government; and the *Financial Report of the United States Government*.[12]

Reserve Bank expenses for financial accounting and reporting services were $69.3 million in 2020, an increase of $4.2 million, or 6.5 percent. The programs that contributed most to Reserve Bank expenses in 2020 were the Cash Accounting Reporting System (CARS) and G-Invoicing.

The Reserve Banks operate and maintain CARS, which handles accounting and reporting for all federal agencies and is the electronic system of record for the government's financial data. In 2020, the Reserve Banks worked with the Treasury to expand the transparency and availability of federal government financial data by integrating CARS with the Treasury's Data Transparency program. The Reserve Banks also supported the Treasury's efforts to promote the availability of federal government financial data to the public by launching the Fiscal Data website, a one-stop shop for federal financial data.[13]

In addition, the Reserve Banks operate and maintain the G-Invoicing application, which is the long-term solution for federal agencies to manage intragovernmental financial transactions. In 2020, the Reserve Banks worked with the Treasury to coordinate federal agency outreach and implement

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[12] The Daily Treasury Statement summarizes the U.S. Treasury's cash and debt operations for the federal government on a modified cash basis and can be accessed at https://fiscal.treasury.gov/reports-statements/dts/. The Monthly Treasury Statement summarizes the financial activities of the federal government and off-budget federal entities and can be accessed at https://www.fiscal.treasury.gov/reports-statements/mts/. The Combined Statement of Receipts, Outlays, and Balances of the United States Government is recognized as the official publication of the government's receipts and outlays and can be accessed at https://fiscal.treasury.gov/reports-statements/combined-statement/. The Financial Report of the United States Government provides the President, Congress, and the American people with a comprehensive view of the federal government's finances and can be accessed at https://fiscal.treasury.gov/reports-statements/financial-report/.

[13] Fiscal Data can be accessed at https://fiscaldata.treasury.gov.

system enhancements, which will prepare agencies for a federal government mandate to adopt G-Invoicing for all buy/sell intragovernmental transactions.[14]

Infrastructure and Technology Services

The Reserve Banks design, build, and maintain the technology infrastructure and environments that host the majority of applications that the Reserve Banks develop, operate, or maintain on behalf of the Treasury.

In 2020, the Reserve Banks launched a cloud platform and created a plan to begin migrating applications into the environment. The Reserve Banks continued to effectively operate infrastructure, modernize aging systems, increase automation to increase efficiency, and implement Agile management practices to streamline the development process. The Reserve Banks also continued to strengthen their systems against a host of new and evolving cybersecurity threats.

Reserve Bank expenses for infrastructure and technology services were $150.5 million in 2020, an increase of $10.8 million, or 7.7 percent.

Services Provided to Other Entities

The Reserve Banks, when permitted by federal statute or when required by the Secretary of the Treasury, also provide other domestic and international entities with U.S.-dollar-denominated banking services, which include funds, securities, and gold safekeeping; securities clearing, settlement, and investment; and correspondent banking.

The Reserve Banks also issue and maintain, in electronic form, many federal agency, government-sponsored enterprise, and certain international organizations securities. The majority of securities services are performed for the Federal Home Loan Mortgage Association (Freddie Mac), the Federal National Mortgage Association (Fannie Mae), and the Government National Mortgage Association (Ginnie Mae).

Reserve Bank expenses for services provided to other entities were $39.3 million in 2020, a decrease of $1.2 million, or 2.8 percent.

Evolutions and Improvements to the System

The Federal Reserve performs many functions in the payment system, including payment system operator, supervisor and regulator of financial institutions and systemically important financial market utilities, researcher, and catalyst for system improvements.

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[14] Federal agencies must implement G-Invoicing for new orders by October 2022. Additional information can be accessed at: https://fiscal.treasury.gov/g-invoice/.

Digital Innovations

The Federal Reserve views developments in financial technology through the lens of its longstanding public policy goals of safety and soundness of financial institutions, consumer protection, safety and efficiency for the payment system, and financial stability. Within that framework, the Federal Reserve is actively engaged in supporting responsible innovation while ensuring associated risks are appropriately identified and managed.

The Federal Reserve is studying the implications of emerging financial technologies, including distributed ledger technologies and associated financial products such as cryptocurrencies and stablecoins. These technologies have raised fundamental questions about appropriate legal and regulatory safeguards. The Federal Reserve continues to monitor developments and works with domestic and international counterparts to better understand and manage the implications of these innovations.

Payment System Regulatory Activity in 2020

Congress has assigned to the Board responsibility for implementing the Federal Reserve Act and certain other laws pertaining to a wide range of banking and financial activities, including those related to the payment and settlement system. The Board implements those laws in part through its regulations (see the Board's website at https://www.federalreserve.gov/supervisionreg/reglisting.htm).

Regulation CC Amendments

In 2019, the Board and the Consumer Financial Protection Bureau jointly issued regulations that amended Regulation CC.[15]

The agencies implemented a statutory requirement in the Electronic Funds Availability (EFA) Act to adjust the dollar amounts under the EFA Act for inflation. The amendments for adjusting the dollar amounts under the EFA Act for inflation went into effect July 1, 2020.

Other Improvements and Efforts

The Reserve Banks have been engaged in a number of multiyear technology initiatives that will modernize their priced-services processing platforms. These investments are expected to enhance efficiency, the overall quality of operations, and the Reserve Banks' ability to offer additional services, consistent with the longstanding principles of fostering efficiency and safety, to depository institutions. The Reserve Banks continued to enhance the resiliency and information security posture of the Wholesale Payment Systems through Reserve Bank led cyber initiatives to respond to

[15] Availability of Funds and Collection of Checks, 84 Fed. Reg. 31,687 (July 3, 2019), https://www.govinfo.gov/content/pkg/FR-2019-07-03/html/2019-13668.htm.

Box 5.2. The Federal Reserve's Research Work on Central Bank Digital Currency (CBDC)

Like other central banks, the Federal Reserve is engaged in research into CBDC. Its work does not indicate a decision to issue a CBDC; the research focuses on how a CBDC could improve on an already safe, effective, dynamic, and efficient domestic payments system and recognizes that implications and risks must be thought through very carefully. The design of a CBDC would raise important monetary policy, financial stability, consumer protection, cybersecurity, legal, and privacy considerations that will require careful thought and analysis.

The Federal Reserve has two core research initiatives currently under way, which are focused on better understanding technical issues related to CBDC. The Technology Lab at the Federal Reserve Board is looking at digital currencies broadly with a focus on understanding different technologies and design implications. Project Hamilton at the Federal Reserve Bank of Boston is focused on developing a hypothetical general-purpose CBDC. These ongoing research and experimentation initiatives are focused on how a CBDC might act as a complement to existing payment mechanisms—such as cash and bank deposits—not as a replacement for them.

The Federal Reserve is also actively engaged with a wide variety of stakeholders, such as those from government, academia, and the private sector, to gather perspectives and expertise about potential CBDC uses, the range of design options, and other considerations. Additionally, the Federal Reserve is in contact with international counterparts and is closely following developments in other jurisdictions. In October 2020, the Federal Reserve, along with six other central banks and the Bank for International Settlements, published a report that identifies foundational principles for a CBDC to help central banks meet their public policy objectives.[1]

[1] Bank for International Settlements, *Central Bank Digital Currencies: Foundational Principles and Core Features* (Bank for International Settlements, October 2020), https://www.bis.org/publ/othp33.htm.

environmental threats and cyberthreats. The Reserve Banks also recently implemented a new FedACH-processing platform to improve the efficiency and reliability of FedACH operations. In 2020, the Reserve Banks advanced the safety and security of FedLine Solutions by making progress on key infrastructure upgrades and network modernization, as well as through proactive monitoring of an evolving threat environment and by strengthening endpoint security policies.

During 2020, the Federal Reserve continued work to replace the aging high-speed currency processing equipment and sensors at the Reserve Banks for deployment through 2028. In 2020, the Federal Reserve selected a vendor to develop the high-speed currency processing equipment for delivery beginning in 2025. In advance of the production rollout, prototype and preliminary equipment will be installed and tested at pilot offices between 2021 and 2024. A research and development effort was initiated to update currency sensors and camera systems for integration with the equipment.

The improvement of the efficiency, effectiveness, and security of information technology (IT) services and operations continued to be a central focus of the Reserve Banks. Under the leadership of the Federal Reserve's National IT organization and CIO, the System IT Strategic Plan was refreshed in 2020 for 2021–23 to set priorities, align IT direction and resources, and ensure IT leaders and team members are working towards a common set of goals. The goals of the plan are security, simplicity, and productivity with priorities in modernized application delivery, cloud and modern infrastructure, digital work and collaboration, data management and analytics, cybersecurity, and IT workforce skills. National IT continues to guide the plan and track progress toward the goals.

The Reserve Banks remained vigilant about their cybersecurity posture, investing in risk-mitigation initiatives and programs and continuously monitoring and assessing cybersecurity risks to operations and protecting systems and data. The Federal Reserve implemented several cybersecurity initiatives that enhanced identity and access management capabilities; enhanced the ability to respond to evolving cybersecurity threats with agility, decisiveness, and speed by streamlining decisionmaking during a cybersecurity incident; and continued to improve continuous monitoring capabilities of critical assets.

Several Reserve Banks took action in 2020 to maintain and renovate their facilities. Major multi-year facility programs at several Reserve Bank offices continued, focused on updating obsolescent building systems to ensure infrastructure resiliency and continuity of operations. The Philadelphia Reserve Bank continued construction activities for its multiyear program to replace its entire mechanical and electrical infrastructure. Other programs addressed the need to update office and operations areas in support of efficiency and working environment.

For more information on the acquisition costs and net book value of the Reserve Banks and Branches, see table G.13 in appendix G ("Statistical Tables") of this annual report.

Oversight of Federal Reserve Banks

The combined financial statements of the Reserve Banks and the financial statements of each of the 12 Reserve Banks are audited annually by an independent public accounting firm retained by the Board of Governors.[16] In addition, the Reserve Banks are subject to oversight by the Board of Governors, which performs its own reviews (see box 5.3).

The Reserve Banks use the 2013 framework established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to assess their internal controls over financial reporting, including the safeguarding of assets. The management of each Reserve Bank annually provides an assertion letter to its board of directors that confirms adherence to COSO standards.

[16] See "Federal Reserve Banks Combined Financial Statements" at https://www.federalreserve.gov/aboutthefed/audited-annual-financial-statements.htm.

Box 5.3. Payment System Research and Analysis

The Federal Reserve conducts research on a wide range of topics related to the design and activities of payment, clearing, and settlement systems and financial market infrastructures, as well as the role of these systems in the commercial activities of consumers, businesses, and governments.

In 2020, topics examined in Federal Reserve research included the following:

- measurement and analysis of long-run trends and short-run developments in the use of established payment methods[1]
- drivers and potential effects of innovations in the payment system, particularly those related to new and emerging technologies, such as instant payments
- design, oversight, and regulation of financial market infrastructures
- developments related to payments fraud

For more information, see the Board's Payment Research website at https://www.federalreserve.gov/paymentsystems/payres_about.htm; see also Federal Reserve Bank Payments Groups at https://www.federalreserve.gov/paymentsystems/payres_fedgroups.htm.

[1] In particular, see information about recent releases by the Federal Reserve Payments Study, available at https://www.federalreserve.gov/paymentsystems/fr-payments-study.htm.

The Federal Reserve Board engaged KPMG LLP (KPMG) to audit the 2020 combined and individual financial statements of the Reserve Banks and the financial statements of the five limited liability companies (LLCs) that are associated with the Board of Governors' actions to address the coronavirus pandemic, of which four LLCs are consolidated in the statements of the Federal Reserve Bank of New York and one LLC is consolidated in the statements of the Federal Reserve Bank of Boston.[17]

In 2020, KPMG also conducted audits of internal controls over financial reporting for each of the Reserve Banks. Fees for KPMG services totaled $10.3 million, of which approximately $3.0 million was for the audits of the LLCs.[18] To ensure auditor independence, the Board of Governors requires that KPMG be independent in all matters relating to the audits. Specifically, KPMG may not perform services for the Reserve Banks or affiliated entities that would place it in a position of auditing its own work, making management decisions on behalf of the Reserve Banks, or in any other way impairing its audit independence. In 2020, the Reserve Banks did not engage KPMG for significant non-audit services.

[17] In addition, KPMG audited the Office of Employee Benefits of the Federal Reserve System (OEB), the Retirement Plan for Employees of the Federal Reserve System (System Plan), and the Thrift Plan for Employees of the Federal Reserve System (Thrift Plan). The System Plan and the Thrift Plan provide retirement benefits to employees of the Board, the Federal Reserve Banks, the OEB, and the Consumer Financial Protection Bureau.

[18] Each LLC will reimburse the Board of Governors for the fees related to the audit of its financial statements from the entity's available assets.

The Board's reviews of the Reserve Banks include a wide range of oversight activities, conducted primarily by its Division of Reserve Bank Operations and Payment Systems. Division personnel monitor, on an ongoing basis, the activities of each Reserve Bank, Federal Reserve Information Technology, and the System's Office of Employee Benefits (OEB). The oversight program identifies the most strategically important Reserve Bank current and emerging risks and defines specific approaches to achieve a comprehensive evaluation of the Reserve Banks' controls, operations, and management effectiveness.

The comprehensive reviews include an assessment of the internal audit function's effectiveness and its conformance to the Institute of Internal Auditors' (IIA) International Standards for the Professional Practice of Internal Auditing, applicable policies and guidance, and the IIA's code of ethics.

The Board also reviews System Open Market Account (SOMA) and foreign currency holdings annually to

- determine whether the New York Reserve Bank, while conducting the related transactions and associated controls, complies with the policies established by the Federal Open Market Committee (FOMC); and
- assess SOMA-related IT project management and application development, vendor management, and system resiliency and contingency plans.

In addition, KPMG audits the year-end schedule of SOMA participated asset and liability accounts and the related schedule of participated income accounts. The FOMC is provided with the external audit reports and a report on the Board review.

Income and Expenses

Annually, the Board releases the Combined Reserve Banks financial statements with financial information as of December 31 and includes the accounts and results of operations of each of the 12 Reserve Banks.

In 2020, income was $102.0 billion, compared with $103.2 billion in 2019; expenses totaled $13.6 billion, compared with $47.7 billion in 2019; and net income before remittances to Treasury totaled $88.6 billion in 2020, compared with $55.5 billion in 2019.

Table 5.3 summarizes the income, expenses, and distributions of net earnings of the Reserve Banks for 2020 and 2019. Appendix G of this report, "Statistical Tables," provides more detailed

Table 5.3. Income, expenses, and distribution of net earnings of the Federal Reserve Banks, 2020 and 2019

Millions of dollars

Item	2020	2019
Current income	102,036	103,220
Loan interest income	358	1
SOMA interest income	101,184	102,737
Other current income[1]	494	482
Net expenses	13,455	45,423
Operating expenses	4,926	4,690
Reimbursements	-732	-729
System pension service cost	662	510
Interest paid on depository institutions deposits and others	7,883	34,939
Interest expense on securities sold under agreements to repurchase	711	6,012
Other expenses	4	1
Current net income	88,581	57,797
Net additions to (deductions from) current net income	2,197	-169
Treasury securities gains, net	2	0
Federal agency and government-sponsored enterprise mortgage-backed securities (losses) gains, net	664	9
Foreign currency translation gains (losses), net	1,542	-168
Other additions or deductions	-12	-10
Assessments by the Board of Governors[2]	2,295	2,170
For Board expenditures	947	814
For currency costs	831	837
For Consumer Financial Protection Bureau costs[3]	517	519
Net income before providing for remittances to the Treasury	88,482	55,458
Consolidated variable interest entities: (Loss), net	-1,785	0
Consolidated variable interest entities: Non-controlling interest loss, net	1,854	0
Reserve Bank and consolidated variable interest entities net income before providing for remittances to the Treasury	88,552	55,458
Earnings remittances to the Treasury	86,890	54,893
Net income after providing for remittances to the Treasury	1,662	565
Other comprehensive gain (loss)	-1,276	149
Comprehensive income	386	714
Total distribution of net income	87,276	55,607
Dividends on capital stock	386	714
Earnings remittances to the Treasury	86,890	54,893

[1] Includes income from priced services and securities lending fees.

[2] A detailed account of the assessments and expenditures of the Board of Governors appears in the Board of Governors Financial Statements (see https://www.federalreserve.gov/aboutthefed/audited-annual-financial-statements.htm).

[3] The Board of Governors assesses the Reserve Banks to fund the operations of the Consumer Financial Protection Bureau.

information on the Reserve Banks, including the consolidated LLCs.[19] Additionally, appendix G summarizes the Reserve Banks' 2020 budget performance and 2021 budgets, budgeting processes, and trends in expenses and employment.

SOMA Holdings

The FOMC has authorized and directed the Federal Reserve Bank of New York to execute open market transactions to the extent necessary to carry out the domestic policy directive adopted by the FOMC. The Federal Reserve Bank of New York, on behalf of the Reserve Banks, holds in the SOMA the resulting securities, which include U.S. Treasuries, federal agency and government-sponsored enterprise debt securities, federal agency and government-sponsored enterprise mortgage-backed securities, investments denominated in foreign currencies, and commitments to buy or sell related securities.[20]

Table 5.4 summarizes the average daily assets (liabilities), current income (expenses), and average interest rate of SOMA holdings for 2020 and 2019.

Lending

In 2020, the average daily balance and the average rate of interest earned for Reserve Bank lending programs were as follows:

- Primary, secondary, and seasonal credit extended was $8,848 million and 0.25 percent.
- Primary Dealer Credit Facility (PDCF) was $6,419 million and 0.25 percent.
- Money Market Mutual Fund Liquidity Facility (MMLF) was $19,062 million and 1.23 percent.
- Paycheck Protection Program Liquidity Facility (PPPLF) was $56,994 million and 0.35 percent.

In addition, the Reserve Banks provided loans to special purpose vehicles (SPVs) that were established to administer liquidity programs created in response to the coronavirus pandemic. These SPVs provided liquidity to market participants through the purchase of assets in accordance with the terms of each liquidity program. More information about the SPVs and the related liquidity programs can be found in box 2 in section 3, "Financial Stability."

[19] Table G.8A is a statement of condition for each Reserve Bank, table G.9 details the income and expenses of each Reserve Bank for 2020, table G.10 shows a condensed statement for each Reserve Bank for the years 1914 through 2020, and table G.12 gives the number and annual salaries of officers and employees for each Reserve Bank.

[20] See table G.2 in appendix G for a list of Federal Reserve holdings of U.S. Treasuries and federal agency securities.

Table 5.4. System Open Market Account (SOMA) holdings and Loans of the Federal Reserve Banks, 2020 and 2019

Millions of dollars, except as noted

Item	Average daily assets (+)/liabilities (–)			Current income (+)/expense (–)			Average interest rate (percent)	
	2020	2019	Year-over-year change	2020	2019	Year-over-year change	2020	2019
SOMA Holdings								
Securities purchased under agreements to resell	98,003	56,971	41,032	723	971	-248	0.74	1.70
U.S. Treasury securities[1]	4,061,849	2,233,384	1,828,465	67,539	58,532	9,007	1.66	2.62
Government-sponsored enterprise debt (GSE) securities[1]	2,646	2,682	-36	135	137	-2	5.10	5.10
Federal agency and GSE mortgage-backed securities[2]	1,831,907	1,574,798	257,109	32,338	43,124	-10,786	1.77	2.74
Foreign currency denominated investments[3]	21,127	20,744	383	-40	-33	-7	-0.19	-0.16
Central bank liquidity swaps[4]	134,529	273	134,256	489	6	483	0.36	2.43
Other SOMA assets[5]	74	4	70	*	*	-*	0.04	1.85
Total SOMA assets	6,150,135	3,888,856	2,261,279	101,184	102,737	-1,553	1.65	2.64
Securities sold under agreements to repurchase: primary dealers and expanded counterparties	-8,749	-4,981	-3,768	-14	-102	88	0.16	2.04
Securities sold under agreements to repurchase: foreign official and international accounts	-226,215	-269,399	43,184	-697	-5,910	5,213	0.31	2.19
Total securities sold under agreements to repurchase	-234,964	-274,380	39,416	-711	-6,012	5,301	0.30	2.19
Other SOMA liabilities[6]	-4,188	-97	-4,091	n/a	n/a	n/a	n/a	n/a
Total SOMA liabilities	-239,152	-274,477	35,325	-711	-6,012	5,301	0.30	2.19
Total SOMA holdings	**5,910,983**	**3,614,379**	**2,296,604**	**100,473**	**96,726**	**3,747**	**1.70**	**2.68**

1 Face value, net of unamortized premiums and discounts.
2 Face value, which is the remaining principal balance of the securities, net of unamortized premiums and discounts. Does not include unsettled transactions.
3 Foreign currency denominated assets are revalued daily at market exchange rates.
4 Dollar value of foreign currency held under these agreements valued at the exchange rate to be used when the foreign currency is returned to the foreign central bank. This exchange rate equals the market exchange rate used when the foreign currency was acquired from the foreign central bank.
5 Cash and short-term investments related to the federal agency and government-sponsored enterprise mortgage-backed securities (GSE MBS) portfolio.
6 Represents the obligation to return cash margin posted by counterparties as collateral under commitments to purchase and sell federal agency and GSE MBS, as well as obligations that arise from the failure of a seller to deliver securities on the settlement date.
n/a Not applicable.
* Less than $500,000.

Pro Forma Financial Statements for Federal Reserve Priced Services

Table 5.5. Pro forma balance sheet for Federal Reserve priced services, December 31, 2020 and 2019
Millions of dollars

Item	2020		2019	
Short-term assets (note 1)				
Imputed investments	569.2		656.2	
Receivables	40.8		39.3	
Materials and supplies	0.7		0.6	
Prepaid expenses	12.4		12.2	
Items in process of collection	131.7		80.7	
Total short-term assets		754.8		789.0
Long-term assets (note 2)				
Premises	116.7		111.5	
Furniture and equipment	32.8		32.7	
Leases, leasehold improvements, and long-term prepayments	74.7		91.6	
Deferred tax asset	178.1		176.1	
Total long-term assets		402.3		411.9
Total assets		1,157.1		1,200.9
Short-term liabilities (note 3)				
Deferred-availability items	701.0		736.9	
Short-term debt	30.5		27.4	
Short-term payables	23.4		24.7	
Total short-term liabilities		754.8		789.0
Long-term liabilities (note 3)				
Long-term debt	6.3		10.1	
Accrued benefit costs	338.2		341.8	
Total long-term liabilities		344.5		351.9
Total liabilities		1,099.2		1,140.9
Equity (including accumulated other comprehensive loss of $630.7 million and $618.7 million at December 31, 2020 and 2019, respectively)		57.9		60.0
Total liabilities and equity (note 3)		1,157.1		1,200.9

Note: Components may not sum to totals because of rounding. The accompanying notes are an integral part of these pro forma priced services financial statements.

Table 5.6. Pro forma income statement for Federal Reserve priced services, 2020 and 2019
Millions of dollars

Item	2020		2019	
Revenue from services provided to depository institutions (note 4)		446.2		443.6
Operating expenses (note 5)		426.9		440.7
Income from operations		19.3		2.9
Imputed costs (note 6)				
Interest on debt	0.3		0.3	
Interest on float	-0.8		-4.8	
Sales taxes	3.9	3.4	4.2	-0.3
Income from operations after imputed costs		15.9		3.2
Other income and expenses (note 7)				
Investment income	0.7		0.5	
Income before income taxes		16.6		3.7
Imputed income taxes (note 6)		3.7		0.8
Net income		13.0		2.9
Memo: Targeted return on equity (note 6)		5.9		5.4

Note: Components may not sum to totals because of rounding. The accompanying notes are an integral part of these pro forma priced services financial statements.

Table 5.7. Pro forma income statement for Federal Reserve priced services, by service, 2020
Millions of dollars

Item	Total	Commercial check collection	Commercial ACH	Fedwire funds	Fedwire securities
Revenue from services (note 4)	446.2	113.9	159.1	144.4	28.8
Operating expenses (note 5)[1]	426.9	106.9	161.4	131.0	27.6
Income from operations	19.3	7.0	(2.3)	13.4	1.1
Imputed costs (note 6)	3.4	1.1	0.7	1.3	0.3
Income from operations after imputed costs	15.9	5.9	(3.0)	12.1	0.8
Other income and expenses, net (note 7)	0.7	0.2	0.3	0.2	0.0
Income before income taxes	16.6	6.1	(2.7)	12.4	0.8
Imputed income taxes (note 6)	3.7	1.4	(0.6)	2.7	0.2
Net income	13.0	4.8	(2.1)	9.6	0.7
Memo: Targeted return on equity (note 6)	5.9	1.3	2.0	2.3	0.3
Cost recovery (percent) (note 8)	101.6	103.2	97.5	105.3	101.1

Note: Components may not sum to totals because of rounding. Excludes amounts related to development of the FedNow Service. The accompanying notes are an integral part of these pro forma priced services financial statements.
[1] Operating expenses include pension costs, Board expenses, and reimbursements for certain nonpriced services.

Notes to Pro Forma Financial Statements for Priced Services

(1) Short-Term Assets

Receivables are composed of fees due the Reserve Banks for providing priced services and the share of suspense- and difference-account balances related to priced services.

Items in process of collection are gross Federal Reserve cash items in process of collection (CIPC), stated on a basis comparable to that of a commercial bank. They reflect adjustments for intra-Reserve Bank items that would otherwise be double-counted on the combined Federal Reserve balance sheet and adjustments for items associated with nonpriced items (such as those collected for government agencies). Among the costs to be recovered under the Monetary Control Act is the cost of float, or net CIPC during the period (the difference between gross CIPC and deferred-availability items, which is the portion of gross CIPC that involves a financing cost), valued at the federal funds rate. Investments of excess financing derived from credit float are assumed to be invested in federal funds.

(2) Long-Term Assets

Long-term assets consist of long-term assets used solely in priced services and the priced-service portion of long-term assets shared with nonpriced services, including a deferred tax asset related to the priced services pension and postretirement benefits obligation. The tax rate associated with the deferred tax asset was 22.1 percent for 2020 and 22.2 percent for 2019.

Long-term assets also consist of an estimate of the assets of the Board of Governors used in the development of priced services.

(3) Liabilities and Equity

Under the matched-book capital structure for assets, short-term assets are financed with short-term payables and imputed short-term debt, if needed. Long-term assets are financed with long-term liabilities, imputed long-term debt, and imputed equity, if needed. To meet the Federal Deposit Insurance Corporation (FDIC) requirements for a well-capitalized institution, in 2020 equity is imputed at 5.0 percent of total assets and 10.3 percent of risk-weighted assets, and 2019 equity is imputed at 5.0 percent of total assets and 10.4 percent of risk-weighted assets.

The Board's Payment System Risk policy reflects the international standards for financial market infrastructures developed by the Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissions in the Principles for Financial Market Infrastructures. The policy outlines the expectation that the Fedwire Services will meet or exceed the applicable risk-management standards. Although the Fedwire Funds Service does not face the risk that a business shock would cause the service to wind down in a disorderly manner and disrupt the stability of the financial system, in order to foster competition with private-sector financial market infrastructures, the Reserve Banks' priced services will hold six months of the Fedwire Funds Service's current operating expenses as liquid net financial assets and equity on the pro forma balance sheet and, if necessary, impute additional assets and equity to meet the requirement. The imputed assets held as liquid net financial assets are cash items in process of collection, which are assumed to be invested in federal funds. In 2020 and 2019, there was sufficient assets and equity such that additional imputed balances were not required.

In accordance with ASC 715, *Compensation–Retirement Benefits*, the Reserve Banks record the funded status of pension and other benefit plans on their balance sheets. To reflect the funded status of their benefit plans, the Reserve Banks recognize the deferred items related to these plans, which include prior service costs and actuarial gains or losses, on the balance sheet. This results in an adjustment to the pension and other benefit plan liabilities related to priced services and the recognition of an associated deferred tax asset with an offsetting adjustment, net of tax, to accumulated other comprehensive income (AOCI), which is included in equity. The Reserve Bank priced services recognized a pension asset, which is a component of accrued benefit costs, of $44.5 million in 2020 and $17.0 million in 2019. The change in the funded status of the pension and other benefit plans resulted in a corresponding decrease in accumulated other comprehensive loss of $6.6 million in 2020.

(4) Revenue

Revenue represents fees charged to depository institutions for priced services and is realized from each institution through direct charges to an institution's account.

(5) Operating Expenses

Operating expenses consist of the direct, indirect, and other general administrative expenses of the Reserve Banks for priced services (that is, Check, ACH, FedWire Funds, and FedWire Securities) and the expenses of the Board related to the development of priced services. Board expenses were $6.7 million in 2020 and $7.0 million in 2019. Operating expenses exclude amounts related to the development of the FedNow Service.

In accordance with ASC 715, the Reserve Bank priced services recognized qualified pension-plan service costs of $37.1 million in 2020 and $30.8 million in 2019.[21] Operating expenses also include the nonqualified service costs of $2.1 million in 2020 and $1.6 million in 2019.[22] In 2019 Reserve Banks adopted an update to ASC 715 requiring disaggregation of other components of net benefit expense from service costs. ASC 715 does not change the systematic

[21] The prior year qualified pension-plan operating expense was restated from $28.8 million to $30.8 million because of the adoption of ASU 2017-07 in which other components of operating expense were disaggregated from service costs.

[22] The prior year nonqualified net pension expense of $9.9 million was restated to $1.6 million because of the adoption of ASU 2017-07 in which other components of operating expense were disaggregated from service costs.

approach required by generally accepted accounting principles to recognize the expenses associated with the Reserve Banks' benefit plans in the income statement. As a result, these expenses do not include amounts related to changes in the funded status of the Reserve Banks' benefit plans, which are reflected in AOCI.

The income statement by service reflects revenue, operating expenses, imputed costs, other income and expenses, and cost recovery. The tax rate associated with imputed taxes was 22.1 percent for 2020 and 22.2 percent for 2019.

(6) Imputed Costs

Imputed costs consist of income taxes, return on equity, interest on debt, sales taxes, and interest on float. Many imputed costs are derived from the PSAF model. The 2020 cost of short-term debt imputed in the PSAF model is based on nonfinancial commercial paper rates; the cost of imputed long-term debt is based on Merrill Lynch Corporate and High Yield Index returns; and the effective tax rate is derived from U.S. publicly traded firm data, which serve as the proxy for the financial data of a representative private-sector firm. The after-tax rate of return on equity is based on the returns of the equity market as a whole.[23]

Interest is imputed on the debt assumed necessary to finance priced-service assets. These imputed costs are allocated among priced services according to the ratio of operating expenses, less shipping expenses, for each service to the total expenses, less the total shipping expenses, for all services.

Interest on float is derived from the value of float to be recovered for the check and ACH services, Fedwire Funds Service, and Fedwire Securities Services through per-item fees during the period. Float income or cost is based on the actual float incurred for each priced service.

The following shows the daily average recovery of actual credit float by the Reserve Banks for 2020 and 2019, in millions of dollars:[24]

	2020	2019
Total float	-248.1	-225.3
Float not related to priced services[1]	-5.4	-9.7
Float subject to recovery through per-item fees	-242.7	-215.6

[1] Float not related to priced services includes float generated by services to government agencies and by other central bank services.

[23] See Federal Reserve Bank Services Private-Sector Adjustment Factor, 77 Fed. Reg. 67,007 (November 8, 2012), https://www.gpo.gov/fdsys/pkg/FR-2012-11-08/pdf/2012-26918.pdf, for details regarding the PSAF methodology change.

[24] Credit float occurs when the Reserve Banks debit the paying bank for checks and other items prior to providing credit to the depositing bank.

Float that is created by account adjustments due to transaction errors and the observance of non-standard holidays by some depository institutions was recovered from the depository institutions through charging institutions directly. Float subject to recovery is valued at the federal funds rate. Certain ACH funding requirements and check products generate credit float; this float has been subtracted from the cost base subject to recovery in 2020 and 2019.

(7) Other Income and Expenses

Other income consists of income on imputed investments. Excess financing resulting from additional equity imputed to meet the FDIC well-capitalized requirements is assumed to be invested and earning interest at the 3-month Treasury bill rate.

(8) Cost Recovery

Annual cost recovery is the ratio of revenue, including other income, to the sum of operating expenses, imputed costs, imputed income taxes, and after-tax targeted return on equity.

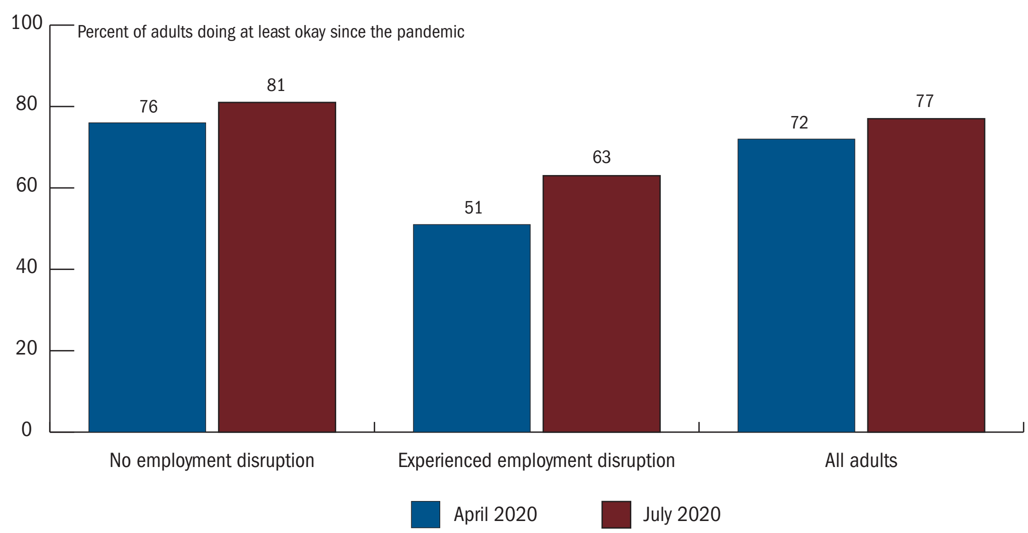
6 | Consumer and Community Affairs

The Federal Reserve is committed to promoting fair and transparent financial service markets, protecting consumers' rights, and ensuring that its policies and research take consumer and community perspectives into account. The Board supports consumer financial inclusion and community development through targeted work in supervision, regulatory policy, and research and analysis. This section discusses the Federal Reserve's key consumer and community affairs activities during 2020:

- formulating and carrying out supervision and examination policy to ensure that financial institutions comply with consumer protection laws and regulations and meet requirements of community reinvestment laws and regulations;
- writing and reviewing regulations that implement consumer protection and community reinvestment laws;
- conducting research, analysis, and data collection to identify and assess emerging consumer and community development issues and risks to inform policy decisions (also see figure 6.1); and
- identifying issues and advancing what works in community development by engaging, convening, and informing key stakeholders.

Figure 6.1. Federal Reserve surveys examine the COVID-19 impact on economic well-being

To better understand the pandemic's impact on consumer financial circumstances, the Federal Reserve conducted surveys in April and July 2020 to supplement the yearly Survey on Household Economics and Decisionmaking. For more on our consumer and community research, see "Consumer Research and Analysis of Emerging Issues and Policy."



Note: All respondents, n = 1,030 in April 2020; 4,174 in July 2020. Key identifies bars in order from left to right. *Employment disruption* means a layoff, reduction of hours, or use of unpaid leave.

Consumer Compliance Supervision

The Federal Reserve's consumer protection supervision program includes a review of state member banks' performance under the Community Reinvestment Act (CRA) as well as assessment of compliance with and enforcement of a wide range of consumer protection laws and regulations including, but not limited to, fair lending, unfair or deceptive acts or practices (UDAP), flood insurance, the Home Mortgage Disclosure Act (HMDA), and the Real Estate Settlement Procedures Act (RESPA).

The Board's Division of Consumer and Community Affairs develops policies that govern, and establish requirements for oversight of, the Reserve Banks' programs for consumer compliance supervision and examination of state member banks and bank holding companies (BHCs).

In addition, the Board coordinates with the prudential regulators and the Consumer Financial Protection Bureau (CFPB) as part of the supervisory coordination requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) and ensures that consumer compliance risk is appropriately incorporated into financial institutions' consolidated risk-management programs.

The Board also oversees the development and delivery of examiner training and supervision-related budget and technology efforts; analyzes bank and BHC applications related to consumer protection, convenience and needs, and the CRA; and oversees the handling of certain types of consumer complaints by the Reserve Banks and directly processes certain consumer complaints such as congressional complaints and appeals.

Consumer Compliance Examinations

Examinations are the Federal Reserve's primary method of ensuring compliance with consumer protection laws and assessing the adequacy of consumer compliance risk-management systems within regulated entities.[1] During 2020, the Board, in conjunction with the federal financial institution regulators and state regulators, took extraordinary measures to support financial institutions in their efforts to meet the financial and economic needs of consumers and communities affected by the COVID-19 emergency.

[1] The Federal Reserve has examination and enforcement authority for federal consumer financial laws and regulations for insured depository institutions with assets of $10 billion or less that are state member banks and not affiliates of covered institutions, as well as for conducting CRA examinations for all state member banks regardless of size. The Federal Reserve Board also has examination and enforcement authority for certain federal consumer financial laws and regulations for insured depository institutions that are state member banks with $10 billion or less in assets, while the Consumer Financial Protection Bureau has examination and enforcement authority for many federal consumer financial laws and regulations for insured depository institutions with over $10 billion in assets and their affiliates (covered institutions), as mandated by the Dodd-Frank Act. For data on state member banks and other institutions supervised by the Federal Reserve (including number and assets of), see section 4, "Supervision and Regulation."

Recognizing the potential impact of the coronavirus on the customers, members, and operations of many financial institutions, the agencies in March issued supervisory letters encouraging financial institutions to meet the financial needs of customers and members affected by the coronavirus. and affirming the agencies' intent to work with affected financial institutions in scheduling examinations or inspections to minimize disruption and burden.[2] This posture included a temporary reduction in examination activities to allow firms to focus on adapting to coronavirus containment actions and provide customers with needed assistance, with the greatest reduction at smaller banks.[3] This also allowed the Federal Reserve and other agencies to focus on outreach and monitoring to help financial institutions of all sizes understand the challenges and risks of this new operating environment.

In June, the Federal Reserve announced that examination activities would resume for all firms, including financial institutions with total consolidated assets of less than $100 billion, since financial institutions had implemented contingency operating plans and adapted operations to the COVID-19 operating environment.[4]

As a result of these actions, the number of examinations the Reserve Banks completed in 2020 decreased compared to 2019, from 479 to 311 . In 2020, the breakdown of examinations completed by Reserve Banks included 159 consumer compliance examinations of state member banks, 138 CRA examinations of state member banks, 14 examinations of foreign banking organizations, and no examinations of Edge Act corporations or agreement corporations.[5]

Community Reinvestment Act

The CRA requires that the Federal Reserve and other federal banking regulatory agencies encourage financial institutions to help meet the credit needs of the local communities where they do business, consistent with safe-and-sound operations. To carry out this mandate, the Federal Reserve

- examines state member banks to assess their performance under the CRA;
- considers banks' CRA performance in context with other supervisory information when analyzing applications for mergers and acquisitions; and

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2 See https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200309a.htm and https://www.federalreserve.gov/supervisionreg/srletters/SR2004.htm.

3 See https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200324a.htm.

4 See https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200615a.htm.

5 Agency and branch offices of foreign banking organizations, Edge Act corporations, and agreement corporations fall under the Federal Reserve's purview for consumer compliance activities. An agreement corporation is a type of bank chartered by a state to engage in international banking. The bank agrees with the Federal Reserve Board to limit its activities to those allowed by an Edge Act corporation. An Edge Act corporation is a banking institution with a special charter from the Federal Reserve to conduct international banking operations and certain other forms of business without complying with state-by-state banking laws. By setting up or investing in Edge Act corporations, U.S. banks are able to gain portfolio exposure to financial investing operations not available under standard banking laws.

- disseminates information about community development practices to bankers and the public through community development offices at the Reserve Banks.[6]

The Federal Reserve assesses and rates the CRA performance of state member banks in the course of examinations conducted by staff at the 12 Reserve Banks. During the 2020 reporting period, the Reserve Banks completed 137 CRA examinations of state member banks. Of those banks examined, 18 were rated "Outstanding," 117 were rated "Satisfactory," 2 were rated "Needs to Improve," and none were rated "Substantial Non-Compliance."

In response to actions taken by banks to support borrowers and communities during the COVID-19 pandemic, the agencies issued guidance to clarify how activities would be considered under the CRA in March and May.[7] The Joint Statement and the Frequently Asked Questions (FAQs) provided clarification on how both retail and community development activities will be considered in examinations, as well as agency treatment of COVID-19 designated disaster areas. This guidance also provided clarification on CRA eligibility and reporting standards for the Small Business Administration Paycheck Protection Program (PPP) and the Federal Reserve Main Street Lending Program.

In September, the Board issued an Advanced Notice of Proposed Rulemaking (ANPR) that invited public comment on an approach to modernize the regulations that implement the CRA by strengthening, clarifying, and tailoring them to reflect the current banking landscape and better meet the core purpose of the CRA. The ANPR sought feedback on ways to evaluate how banks meet the needs of low-and moderate-income (LMI) communities and address inequities in credit access.[8] By reflecting significant stakeholder feedback and providing a long period for comment, one objective of the ANPR is to build a foundation for the banking agencies to come together on a consistent approach to CRA that has the broad support of the intended beneficiaries as well as banks of different sizes and business models.[9]

In an Open Board Meeting, Board members and staff spoke to the intent, structure, and goals of the ANPR, which received unanimous approval by the Board members.[10] The ANPR also solicited feedback on ways to evaluate how banks meet the needs of LMI communities and address inequities in credit access. It sought public comment on an approach to modernize the CRA regulations by strengthening, clarifying, and tailoring them to reflect the current banking landscape and better

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6 For more information on various community development activities of the Federal Reserve System, see https://www.fedcommunities.org/.

7 For more information, see CA 20-4: CRA Consideration for Activities in Response to the Coronavirus at https://www.federalreserve.gov/supervisionreg/caletters/caltr2004.htm and CA 20-10: Community Reinvestment Act (CRA) Consideration for Activities in Response to the Coronavirus at https://www.federalreserve.gov/supervisionreg/caletters/caltr2010.htm.

8 For more information, see https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200921a.htm.

9 For comprehensive information related to CRA, see https://www.federalreserve.gov/consumerscommunities/community-reinvestment-act-proposed-rulemaking.htm.

10 For the video and materials presented at the Open Board Meeting, see https://www.federalreserve.gov/aboutthefed/boardmeetings/20200921open.htm.

meet the core purpose of the CRA. Through analysis and questions that contemplate potential regulatory approaches for assessing performance under the CRA, the ANPR sets forth the goals of tailoring regulations to bank size and business model while accounting for the different credit needs of the local communities—including LMI areas—that are at the heart of the statute.[11]

To inform the analysis and drafting of the CRA ANPR, Board staff gathered extensive CRA performance data to inform potential policy options. The Board released datasets that informed its analysis in March 2020.[12] The Board also continued to update its website (https://www.federalreserve.gov/consumerscommunities/cra_about.htm) to centralize access to all information regarding the CRA.

Consumer Compliance Enforcement Activities

Fair Lending and UDAP Enforcement

The Federal Reserve is committed to ensuring that institutions it supervises comply fully with the federal fair lending laws: the Equal Credit Opportunity Act (ECOA), the Fair Housing Act (FHA), and the Federal Trade Commission Act (FTC Act), which prohibits unfair or deceptive acts or practices. The ECOA prohibits creditors from discriminating against any applicant, in any aspect of a credit transaction, on the basis of race, color, religion, national origin, sex, marital status, or age. In addition, creditors may not discriminate against an applicant because the applicant receives income from a public assistance program or has exercised, in good faith, any right under the Consumer Credit Protection Act. The FHA prohibits discrimination in residential real-estate-related transactions, including the making and purchasing of mortgage loans, on the basis of race, color, religion, sex, handicap, familial status, or national origin.

The Federal Reserve supervises all state member banks for compliance with the FHA. The Federal Reserve and the CFPB have supervisory authority for compliance with the ECOA. For state member banks with assets of $10 billion or less, the Board has the authority to enforce the ECOA. For state member banks with assets over $10 billion, the CFPB has this authority.

With respect to the FTC Act and UDAP, the Federal Reserve has supervisory and enforcement authority over all state member banks, regardless of asset size and consults with the CFPB with regards to state member banks over $10 billion in assets.

The Board is committed to ensuring that the institutions it supervises comply fully with the prohibition on unfair or deceptive acts or practices as outlined in the FTC Act. An act or practice may be

[11] For a list of speeches, see https://www.federalreserve.gov/consumerscommunities/community-reinvestment-act-proposed-rulemaking.htm.

[12] For remarks, see https://www.federalreserve.gov/newsevents/speech/brainard20200108a.htm. For press release and data, see https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200306a.htm.

found to be unfair if it causes or is likely to cause substantial injury to consumers that is not reasonably avoidable by consumers and not outweighed by countervailing benefits to consumers or to competition. A representation, omission, or practice is deceptive if it is likely to mislead a consumer acting reasonably under the circumstances and is material, and thus likely to affect a consumer's conduct or decision regarding a product or service.

When examiners find evidence of potential discrimination or potential UDAP violations, they work closely with the Board's Fair Lending or UDAP Enforcement staff, who provide additional legal and statistical expertise and ensure that fair lending and UDAP laws are enforced consistently and rigorously throughout the Federal Reserve System.

With respect to fair lending, pursuant to the ECOA, if the Board has reason to believe that a creditor has engaged in a pattern or practice of discrimination in violation of the ECOA, the matter must be referred to the Department of Justice (DOJ). The DOJ reviews the referral and determines whether further investigation is warranted. A DOJ investigation may result in a public civil enforcement action. Alternatively, the DOJ may decide to return the matter to the Board for administrative enforcement. When a matter is returned to the Board, staff ensure that the institution takes all appropriate corrective action.

In 2020, the Board referred two fair lending matters to DOJ. One matter involved discrimination based on marital status, in violation of the ECOA. This institution improperly required spousal guarantees on loans, in violation of Regulation B. The second matter involved discrimination based on a pattern or practice of redlining in mortgage lending based on race or national origin.

If there is a fair lending violation that does not constitute a pattern or practice under the ECOA or a UDAP violation, the Federal Reserve takes action to ensure that the violation is remedied by the bank. The Federal Reserve frequently uses informal supervisory tools (such as memoranda of understanding between banks' boards of directors and the Reserve Banks, or board resolutions) to ensure that violations are corrected. When necessary, the Board can bring public enforcement actions.

The Board announced no public UDAP enforcement actions and the termination of two public enforcement actions for UDAP violations in 2020. In June 2020, the Board terminated a consent order, initially issued in 2017, against a bank for deceptive practices related to the bank's mortgage origination services. The order required the bank to pay restitution of approximately $2.8 million to affected consumers and to take other corrective actions.[13] In December 2020, the Board terminated a consent order, initially issued in 2018, against a bank for unfair and deceptive prac-

[13] For more information, see termination announcement at https://www.federalreserve.gov/newsevents/pressreleases/enforcement20200630a.htm.

tices related to the bank's offering of certain add-on products. The order required the bank to pay restitution of approximately $4.75 million to more than 11,000 customers and to take other corrective actions.[14]

Given the complexity of this area of supervision, the Federal Reserve seeks to provide transparency on its perspectives and processes to the industry and the public. Fair Lending and UDAP Enforcement staff meet regularly with consumer advocates, supervised institutions, and industry representatives to discuss fair lending and UDAP issues and receive feedback. Through this outreach, the Board is able to address emerging fair lending and UDAP issues and promote sound fair lending and UDAP compliance. This includes staff participation in numerous meetings, conferences, and trainings sponsored by consumer advocates, industry representatives, and interagency groups.

To better understand consumer concerns arising from the changes to delivery of financial services during the pandemic, in 2020, the Board conducted a series of outreach meetings with consumer advocate groups. These outreach sessions explored areas of concern with respect to existing laws and policies, as well as potential policy gaps. In addition, outreach and technical assistance included the annual Board-sponsored interagency webinar on fair lending supervision, which attracted more than 5,700 registrants in 2020.[15]

Flood Insurance Enforcement

The National Flood Insurance Act imposes certain requirements on loans secured by buildings or mobile homes located in, or to be located in, areas determined to have special flood hazards. Under the Federal Reserve's Regulation H, which implements the act, state member banks are generally prohibited from making, extending, increasing, or renewing any such loan unless the building or mobile home, as well as any personal property securing the loan, are covered by flood insurance for the term of the loan. The law requires the Board and other federal financial institution regulatory agencies to impose civil money penalties when they find a pattern or practice of violations of the regulation.

In 2020, the Federal Reserve issued six formal consent orders and assessed approximately $761,000 in civil money penalties against state member banks to address violations of the flood regulations. These statutorily mandated penalties were forwarded to the National Flood Mitigation Fund held by the Treasury for the benefit of the Federal Emergency Management Agency.

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[14] For more information, see termination announcement at, https://www.federalreserve.gov/newsevents/pressreleases/enforcement20201208a.htm.

[15] To view the webinar, see "Consumer Compliance Outlook Live" at https://consumercomplianceoutlook.org/outlook-live/archives/.

Mergers and Acquisitions

The Board is required by law to consider specific factors when evaluating proposed mergers and acquisitions, including competitive considerations, financial condition, managerial resources (including compliance with laws and regulations), convenience and needs of the community to be served (including the record of performance under the CRA), and financial stability.

In evaluating bank applications, the Federal Reserve relies on the banks' overall compliance record, including recent fair lending examinations. In addition, the Federal Reserve considers the CRA records of the relevant depository institutions, assessments of other relevant supervisors, the supervisory views of examiners, and information provided by the applicant and public commenters. If warranted, the Federal Reserve will also conduct pre-membership exams for a transaction in which an insured depository institution will become a state member bank or in which the surviving entity of a merger would be a state member bank.[16]

The Board provides information on its actions associated with these merger and acquisition transactions, issuing press releases and Board Orders for each.[17] The Federal Reserve also publishes semiannual reports that provide pertinent information on applications and notices filed with the Federal Reserve.[18] The reports include statistics on the number of proposals that were approved, denied, and withdrawn as well as general information about the length of time taken to process proposals. Additionally, the reports discuss common reasons that proposals have been withdrawn from consideration. Furthermore, the reports compare processing times for merger and acquisition proposals that received adverse public comments and those that did not.

Coordination with Other Agencies

Coordination with the Consumer Financial Protection Bureau

During 2020, staff continued to coordinate on supervisory matters with the CFPB in accordance with the Interagency Memorandum of Understanding on Supervision Coordination with the CFPB. The agreement is intended to establish arrangements for coordination and cooperation among the CFPB and the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the National Credit Union Association (NCUA), and the Board of Governors. The agreement strives to minimize unnecessary regulatory burden and to avoid unnecessary duplication of effort and conflicting supervisory directives amongst the prudential regulators. The regulators work cooperatively to share exam schedules for covered institutions and covered activities to

[16] In October 2015, the Federal Reserve issued guidance providing further explanation on its criteria for waiving or conducting such pre-merger or pre-membership examinations. For more information, see https://www.federalreserve.gov/supervisionreg/srletters/SR1511.htm.

[17] To access the Board's Orders on Banking Applications, see https://www.federalreserve.gov/newsevents/pressreleases.htm.

[18] For these reports, see https://www.federalreserve.gov/supervisionreg/semiannual-reports-banking-applications-activity.htm.

Box 6.1. Supervisory and Policy Responses to Address COVID-19 Impacts on Consumers

In 2020, the Federal Reserve encouraged financial institutions to work with borrowers who may be unable to meet their financial obligations and exercised its authority to provide supervisory relief measures to regulated entities. To help banks support consumers, the Board's Division of Consumer and Community Affairs worked with the Supervision and Regulation division and other federal banking agencies to issue numerous statements to provide banks with guidance on policy responses.

The agencies sought to provide relief in the areas most critical to households—mortgages, loan modifications, small-dollar loans, and unrestrained access to savings—with a focus on prudent and responsible credit and banking practices.

In addition, to ensure that bankers, consumer groups, and community organizations were informed and understood the impact of these actions, the Board conducted extensive outreach and communications through webinars (https://bsr.stlouisfed.org/connectingcommunities/), publications (https://consumercomplianceoutlook.org/), and guidance and responses to FAQs (https://www.federalreserve.gov/supervisionreg/caletters/2020.htm).

The supervisory and regulatory actions—including consumer-related actions—are summarized on the Board's COVID-19 webpage at https://www.federalreserve.gov/supervisory-regulatory-action-response-covid-19.htm.

plan simultaneous exams, provide final drafts of examination reports for comment, and share supervisory information.

Coordination with Other Federal Banking Agencies

The Board regularly coordinates with other federal banking agencies, including through the development of interagency guidance, in order to clearly communicate supervisory expectations. The Federal Reserve also works with the other member agencies of the Federal Financial Institutions Examination Council to develop consistent examination principles, standards, procedures, and report formats.[19] In addition, the Federal Reserve participates in the Joint Task Force on Fair Lending, composed of all of the prudential regulators, the CFPB, the DOJ, and the Department of Housing and Urban Development (HUD). In 2020, the banking agencies worked together to develop numerous joint policy statements in response to the impact of COVID-19 in order to support regulatory relief and encourage financial institutions to support consumers and communities (see box 6.1).

Updating Examination Procedures

In 2020, Board staff worked with other agencies to develop and revise examination procedures to provide clarity about supervisor expectations regarding consumer compliance. In March, the member agencies of the Federal Financial Institutions Examination Council (FFIEC) updated guid-

[19] For more information, see https://www.ffiec.gov/.

ance identifying actions that financial institutions should take to minimize the potential adverse effects of a pandemic.[20] This guidance, the Interagency Statement on Pandemic Planning, provided financial institutions direction to periodically review related risk-management plans, including business continuity plans, to ensure that they are able to continue to deliver products and services in a wide range of scenarios and with minimal disruption.

In July, the Board issued examination procedures for institutions supervised by the Federal Reserve with total consolidated assets of $10 billion or less to implement credit reporting and mortgage servicing provisions of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act).[21] The CARES Act, signed into law in March to provide relief to those affected by the COVID-19 emergency, created new responsibilities for furnishers of certain credit information and for mortgage servicers of certain mortgage loans. In these procedures, the Board reiterated that when exercising supervisory and enforcement responsibilities, it will consider the unique circumstances impacting borrowers and institutions resulting from the COVID-19 emergency. The Board also will consider an institution's good-faith efforts demonstrably designed to support consumers and comply with consumer protection laws.

Outreach

The Federal Reserve maintains a comprehensive public outreach program to promote consumer protection, financial inclusion, and community reinvestment. During 2020, the Federal Reserve continued to enhance its program, contributing to Consumer Compliance Outlook and Outlook Live seminars to deliver timely, relevant compliance information to the banking industry as well as to experienced examiners and other regulatory personnel.[22]

In 2020, four issues of *Consumer Compliance Outlook* were released, discussing regulatory and supervisory topics of interest to compliance professionals. This publication is distributed to state member banks as well as to bank and savings and loan holding companies supervised by the Federal Reserve, among other subscribers.[23] In addition, the Federal Reserve offered one Outlook Live seminar, "2020 Fair Lending Interagency Webinar."

Examiner Training

The Federal Reserve's Examiner Training program supports the ongoing professional development of consumer compliance supervisory staff, from an initial introduction to the Federal Reserve System through the development of proficiency in consumer compliance topics sufficient to earn

[20] For more information, see https://www.federalreserve.gov/supervisionreg/srletters/SR2003.htm.
[21] For more information, see https://www.federalreserve.gov/supervisionreg/caletters/caltr2011.htm.
[22] For more information and to access the publications, see https://consumercomplianceoutlook.org/.
[23] For more information and to download the seminars, see https://consumercomplianceoutlook.org/outlook-live/.

an examiner's commission and beyond. The goal of these efforts is to ensure that examiners have the skills necessary to meet their supervisory responsibilities now and in the future.

Consumer Compliance Examiner Commissioning Program

An overview of the Federal Reserve System's Examiner Commissioning Program for assistant examiners is set forth in supervision and regulation (SR)/community affairs (CA) letter SR 17-6/CA 17-1, "Overview of the Federal Reserve's Supervisory Education Programs."[24]

The Consumer Compliance Examiner Commissioning Program is designed to provide an examiner with (1) a foundation for supervision in the Federal Reserve System and (2) the skills necessary to effectively perform examiner-in-charge responsibilities at a non-complex community bank. On average, examiners progress through a combination of self-paced online learning, classroom offerings, virtual instruction, and on-the-job training over a period of two to three years. Achievement is measured by completing the required course content, demonstrating adequate on-the-job knowledge, and passing a professionally validated proficiency examination.

In 2020, 22 examiners passed the Consumer Compliance Proficiency Examination. The combination of multiple training delivery channels offers learners and Reserve Banks an ability to customize learning and meet training demands more individually and cost effectively. Special instructional and curriculum solutions were deployed throughout 2020 to ensure uninterrupted learning for supervisory staff at all levels during the pandemic.

Continuing Professional Development

In addition to providing core examiner training, continuing, career-long learning is offered. Opportunities for continuing professional development include online learning modules, special projects and assignments, self-study programs, rotational assignments, instruction at System schools, mentoring programs, and a consumer compliance examiner forum held every 18 months. Staff have access to continuing professional development resources on a variety of topics, including learning assets for examiners moving into examiner responsibilities at larger financial institutions and other curated learning content.

In 2020, the System continued to offer Rapid Response sessions. Introduced in 2008, these sessions offer examiners webinars and case studies on emerging issues or urgent training needs that result from, for example, the implementation of new laws or regulations. Three Rapid Response sessions with an exclusive consumer compliance focus were designed, developed, and presented to System staff during 2020. Additionally, 18 Rapid Response sessions were offered that addressed a broader range of supervisory issues, including consumer compliance issues and spe-

[24] See https://www.federalreserve.gov/supervisionreg/srletters/sr1706.htm.

cial topics to keep supervision function staff informed of the Federal Reserve's actions during the pandemic.

Responding to Consumer Complaints and Inquiries

The Federal Reserve investigates complaints against state member banks and selected nonbank subsidiaries of BHCs (Federal Reserve regulated entities), and forwards complaints against other creditors and businesses to the agency with relevant authority. Each Reserve Bank investigates complaints against Federal Reserve regulated entities in its District. The Federal Reserve also responds to consumer inquiries on a broad range of banking topics, including consumer protection questions.

Federal Reserve Consumer Help (FRCH) processes consumer complaints and inquiries centrally. In 2020, FRCH processed 36,651 cases. Of these cases, 21,713 were inquiries and the remainder (14,938) were complaints, with most cases received directly from consumers. Approximately 9.2 percent of cases were referred to the Federal Reserve from other federal and state agencies.

While consumers can contact FRCH by a variety of different channels, more than half of the FRCH consumer contacts occurred by telephone (59.2 percent). Nevertheless, 40.8 percent (14,981) of complaint and inquiry submissions were made electronically (via email, online submissions, and fax), and the online form page received 33,176 visits during the year.

Consumer Complaints

Complaints against Federal Reserve regulated entities totaled 4,318 in 2020. Of the total, 89 percent (3,915) were investigated. Sixty-two percent (2,432) of the investigated complaints involved unregulated practices, and 38 percent (1,483) involved regulated practices.

Approximately 4 percent of the total complaints were closed without investigation, pending the receipt of additional information from consumers, referred to another regulatory agency, or withdrawn by the consumer. Six percent of the total complaints were still under investigation in February 2021. (Table 6.1 shows the breakdown of complaints about regulated practices by regulation or act; table 6.2 shows complaints by product type.)

Complaints about Regulated Practices

The majority of regulated practices complaints concerned prepaid accounts (41 percent), credit card accounts (30 percent), checking accounts (15 percent), and real estate (5 percent).[25] The most common prepaid complaints related to inability to withdraw funds on the card (49 percent), error resolution (22 percent), and funds not being deposited on the card (4 percent). The most

[25] Real estate loans include adjustable-rate mortgages, residential construction loans, open-end home equity lines of credit, home improvement loans, home purchase loans, home refinance/closed-end loans, and reverse mortgages.

common credit card complaints related to inaccurate credit reporting (80 percent), payment errors or delays (4 percent), and account opening/closing problems (4 percent). The most common checking account complaints related to funds availability not as expected (42 percent), deposit error resolution (17 percent), and insufficient funds and overdraft charges (10 percent). The most common real estate complaints related to payment errors or delays (12 percent) and escrow problems (10 percent).

Nineteen regulated practices complaints alleging credit discrimination on the basis of prohibited borrower traits or rights were received in 2020. Fifteen discrimination complaints were related to the race, color, national origin, or ethnicity of the applicant or borrower. Four discrimination complaints were related to either the age or sex of the applicant or borrower. Of the closed complaints alleging credit discrimination based on a prohibited basis in 2020, there were three with a violation; however, they were not related to illegal credit discrimination.

Table 6.1. Investigated complaints against state member banks and selected nonbank subsidiaries of bank holding companies about regulated practices, by regulation/act, 2020

Regulation/act	Number
Regulation AA (Unfair or Deceptive Acts or Practices)	13
Regulation B (Equal Credit Opportunity)	20
Regulation BB (Community Reinvestment)	4
Regulation CC (Expedited Funds Availability)	51
Regulation D (Reserve Requirements)	3
Regulation DD (Truth in Savings)	72
Regulation E (Electronic Funds Transfers)	639
Regulation H (National Flood Insurance Act/Insurance Sales)	2
Regulation P (Privacy of Consumer Financial Information)	10
Regulation V (Fair and Accurate Credit Transactions)	84
Regulation Z (Truth in Lending)	111
Check 21	1
Garnishment Rule	2
Fair Credit Reporting Act	441
Fair Debt Collection Practices Act	7
Fair Housing Act	5
Real Estate Settlement Procedures Act	17
Servicemembers Civil Relief Act (SCRA)	1
Total	**1,483**

In 69 percent of investigated complaints against Federal Reserve regulated entities, evidence revealed that institutions correctly handled the situation. Of the remaining 31 percent of investigated complaints, 15 percent were identified errors that were corrected by the bank; 10 percent were deemed violations of law; and the remainder included matters involving litigation or factual disputes, internally referred complaints, or information was provided to the consumer.

Complaints about Unregulated Practices

The Board continued to monitor complaints about banking practices not subject to existing regulations. In 2020, the Board received 2,629 complaints against Federal Reserve regulated entities that involved these unregulated practices. The majority of the complaints were related to electronic transactions/prepaid products (69 percent), checking account activity (12 percent), and credit cards (9 percent).

Table 6.2. Investigated complaints against state member banks and selected nonbank subsidiaries of bank holding companies about regulated practices, by product type, 2020

Subject of complaint/product type	All complaints		Complaints involving violations	
	Number	Percent	Number	Percent
Total	**1,483**	**100**	**142**	**10**
Discrimination alleged				
Real estate loans	10	1	1	1
Credit cards	0	0	0	0
Other	9	1	2	1
Nondiscrimination complaints				
Checking accounts	223	15	33	23
Real estate loans	67	5	6	4
Credit cards	496	33	0	0
Other	678	46	100	70

Note: Percentages may not sum to 100 due to rounding.

Complaint Referrals

In 2020, the Federal Reserve forwarded 10,558 complaints to other regulatory agencies and government offices for investigation. The Federal Reserve forwarded five complaints to HUD that alleged violations of the FHA and were closed in 2020.[26] The Federal Reserve's investigation of these complaints revealed no instances of illegal credit discrimination.

Consumer Inquiries

The Federal Reserve received 21,715 consumer inquiries in 2020 covering a wide range of topics. Consumers were typically directed to other resources, including other federal agencies or written materials, to address their inquiries.

Consumer Laws and Regulations

Throughout 2020, the Board continued to administer its regulatory responsibilities with respect to certain entities and specific statutory provisions of the consumer financial services and fair lending laws. This included drafting regulations and issuing compliance guidance for the industry and the Reserve Banks and fulfilling its role in consulting with the CFPB on consumer financial services and fair lending regulations for which the CFPB has rulemaking responsibility.

[26] A memorandum of understanding between HUD and the federal bank regulatory agencies requires that complaints alleging a violation of the FHA be forwarded to HUD.

Small-Dollar Lending Principles

In May, the federal financial regulatory agencies issued Interagency Lending Principles for Offering Responsible Small-Dollar Loans to encourage supervised banks, savings associations, and credit unions to offer responsible small-dollar loans to customers for both consumer and small business purposes.[27] In doing so, the agencies recognized the important role that responsibly offered small-dollar loans can play in helping customers meet their ongoing needs for credit due to temporary cash-flow imbalances, unexpected expenses, or income shortfalls, including during periods of economic stress, national emergencies, or disaster recoveries. Well-designed small-dollar lending programs can result in successful repayment outcomes that facilitate a customer's ability to demonstrate positive credit behavior and transition into additional financial products.

The principles were offered due to the evolving conditions and products in the small-dollar loan markets over the last several years. The lending principles describe the characteristics of responsible small-dollar loan programs and cover a variety of small-dollar loan structures.[28]

Interagency Questions and Answers for Flood Insurance Proposal

In July, five federal regulatory agencies, including the Board, issued for public comment new and revised Interagency Questions and Answers Regarding Flood Insurance.[29] The Interagency Questions and Answers, which provide information addressing technical flood insurance-related compliance issues, were last updated in 2011.[30]

The agencies proposed new questions and answers in light of changes to flood insurance requirements under the agencies' 2015 joint rule regarding loans in special flood hazard areas. The proposal also revised existing questions and answers to improve clarity and reorganized questions and answers by topic to make it easier for users to find and review information related to technical flood insurance topics. The proposal is intended to help reduce the compliance burden for lenders related to the federal flood insurance laws.

The proposal incorporated new questions and answers in several areas, including

- escrow of flood insurance premiums;
- detached structure exemption to the mandatory purchase of flood insurance requirement; and
- force-placement procedures.

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[27] The agencies are the Board of Governors of the Federal Reserve System, the FDIC, the NCUA, and the OCC.

[28] For more information, see https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20200520a1.pdf.

[29] The agencies are the Board of Governors of the Federal Reserve System, the Farm Credit Administration, the FDIC, the NCUA, and the OCC.

[30] For more information, see *Federal Register* notice 85 Fed. Reg. 40,442 (July 6, 2020) at https://www.govinfo.gov/content/pkg/FR-2020-07-06/pdf/2020-14015.pdf and the press release at https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20200520a1.pdf.

The public comment period for the proposed questions and answers was extended to November to ensure adequate time for input.

Annual Indexing of Exempt Consumer Credit and Lease Transactions

In November 2020, the Board and the CFPB announced that the dollar thresholds in Regulation Z (Truth in Lending) and Regulation M (Consumer Leasing) that will apply in 2021 for determining exempt consumer credit and lease transactions will remain at $58,300. These thresholds are set pursuant to statutory changes enacted by the Dodd-Frank Act that require adjusting these thresholds annually based on the annual percentage increase in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). Transactions at or below the thresholds are subject to the protections of the regulations.[31]

Annual Indexing of Threshold for Small Loan Exemption from Appraisal Requirements for Higher-Priced Mortgage Loans

In November 2020, the Board, the CFPB, and the OCC announced that the threshold for exempting loans from special appraisal requirements for higher-priced mortgage loans would remain the same in 2021, at $27,200.[32] The Dodd-Frank Act amended the Truth in Lending Act to add special appraisal requirements for higher-priced mortgage loans, including a requirement that creditors obtain a written appraisal based on a physical visit to the home's interior before making a higher-priced mortgage loan. The rules implementing these requirements contain an exemption for loans of $25,000 or less and also provide that the exemption threshold will be adjusted annually to reflect increases in the CPI-W.

Annual Adjustment to Community Reinvestment Act (CRA) Asset-Size Thresholds for Small and Intermediate Small Institutions

In December 2020, the Board and the FDIC announced the annual adjustment to the asset-size thresholds used to define "small bank," and "intermediate small bank" under the CRA regulations.[33]

Financial institutions are evaluated under different CRA examination procedures based on their asset-size classification. Those meeting the small and intermediate small institution asset-size thresholds are not subject to the reporting requirements applicable to large banks unless they choose to be evaluated as a large institution.

[31] For more information, see https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201118b.htm.
[32] For more information, see https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201118a.htm.
[33] For more information, see https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201217a.htm.

Annual adjustments to these asset-size thresholds are based on the change in the average of the CPI-W, not seasonally adjusted, for each 12-month period ending in November, with rounding to the nearest million.

As a result of the 1.29 percent increase in the CPI-W for the period ending in November 2020, the definitions of small and intermediate small institutions for CRA examinations were changed as follows:

- *Small bank* means an institution that, as of December 31 of either of the prior two calendar years, had assets of less than $1.322 billion.
- *Intermediate small bank* means a small institution with assets of at least $330 million as of December 31 of both of the prior two calendar years and less than $1.322 billion as of December 31 of either of the prior two calendar years.

These asset-size threshold adjustments took effect on January 1, 2021.

Consumer Research and Analysis of Emerging Issues and Policy

Throughout 2020, the Board analyzed emerging issues in consumer financial services policies and practices in order to understand their implications for the consumer risk analyses and supervisory policies that are core to the Federal Reserve's functions. This research and analysis also provided insight into consumer financial decisionmaking.

Researching Issues Affecting Consumers and Communities

In 2020, the Board explored various issues related to consumers and communities by convening experts, conducting original research, and fielding surveys as part of its continuing to commitment to gain insights into consumers' financial and communities' economic development experiences. The expansion of this work during 2020 was essential to informing the Board's policy work in responding to the COVID-19 emergency, particularly as these efforts were aimed at ameliorating conditions for economically vulnerable households and areas. The information gleaned from these outreach efforts provided insights that informed Federal Reserve actions in supervisory, economic, and lending facilities responses.

Household Economics and Decisionmaking

In order to better understand consumer decisionmaking in the rapidly evolving financial services sector, the Board periodically conducts internet panel surveys to gather data on consumers' experiences and perspectives on various issues of interest.

Results of the Board's seventh annual Survey of Household Economics and Decisionmaking (SHED) were published in the *Report on the Economic Well-Being of U.S. Households in 2019*, *Featuring Supplemental Data from April 2020,* released in May 2020.[34] The survey results reflected the financial situation at the end of 2019; however, many families had their financial lives disrupted in 2020 due to the COVID-19 pandemic. To understand the extent of these disruptions, the Federal Reserve Board implemented two smaller follow-up surveys. The first was fielded in the first week of April 2020 with results included in the May report. The second was fielded in July 2020, with results published in the *Update on the Economic Well-Being of U.S. Households: July 2020 Results*.[35]

The Board first launched the survey in 2013 to understand better consumer decisionmaking in the wake of the Great Recession, with the aim to capture a snapshot of the financial and economic well-being of U.S. households. In doing so, the SHED collects information on households that is not readily available from other sources or is not available in combination with other variables of interest.

The survey asked respondents about specific aspects of their financial lives, including the following areas:

- employment and informal work
- income and savings
- economic preparedness
- banking and credit
- housing and living arrangements
- education and human capital
- education debt and student loans
- retirement

Fielded in October 2019, the findings of the 2019 survey reflected that the financial experiences of individual families were generally positive in the United States before the pandemic, consistent with the economic improvements over the prior six years. The majority of families were faring substantially better than they were when the survey began in 2013. However, the results highlighted areas of persistent challenges and economic disparities across financial measures, even before the spread of COVID-19 in the United States. In particular, the substantial disparities in overall

[34] For the report and related data from the Survey of Household Economics and Decisionmaking, see https://www.federalreserve.gov/consumerscommunities/shed.htm.

[35] For the July survey report, downloadable data, and a video summarizing the findings, see https://www.federalreserve.gov/consumerscommunities/shed.htm.

well-being by race and ethnicity remained in 2019, and the disparity by education widened in recent years.

While most adults were faring reasonably well financially, results also showed that a substantial minority of adults were financially vulnerable at the time of the survey and either could not pay their current month's bills in full or would have struggled to do so if faced with an emergency expense as small as $400. Even fewer had three months of emergency savings to cover expenses in the event of a job loss. This highlights the precarious financial situation that some families were in before the COVID-19 pandemic.

The 2019 survey also explored long-run financial circumstances, including returns to education, housing satisfaction, and retirement savings. It included several new topics that have not been asked in previous years of the survey. These new topics included self-perceptions of discrimination, differences in work locations by education level, and the repercussions of outstanding legal expenses and court costs. Additionally, the survey continued to monitor emerging issues that may be important to the economy in the future, such as experiences working in the gig economy.

Recognizing that these survey results reflected the financial situation at the end of 2019, the April and July 2020 surveys provided insights into how families were faring after the community spread of COVID-19 as well as measures implemented to limit its spread. In early April, the supplemental survey demonstrated that a substantial number of people experienced layoffs or reductions in hours worked and highlighted the extent to which some families dealing with layoffs have struggled to pay their monthly bills. Yet, it also indicated that those not experiencing employment disruptions generally were still faring relatively well financially as of early April.

The July 2020 survey subsequently showed that U.S. families were faring better financially in July than in April, but many still faced uncertainty regarding layoffs and prospects for returning to work. In July, 77 percent of adults said they were doing at least okay financially, up from 72 percent in early April and 75 percent in October 2019. This increase was likely due to some people returning to work as well as the availability of assistance programs either from the government or from charitable organizations.

A substantial number of families received one or more forms of financial assistance, and the effects of these programs were apparent in people's overall financial well-being and ability to cover expenses. The July survey demonstrated that people appeared better able to handle small financial emergencies than they were nine months prior in October 2019. Seventy percent of adults said in July that they would be able to pay an unexpected $400 emergency expense entirely by using cash, savings, or a credit card paid off at the next statement—an increase from 63 percent in October.

In addition to fielding and analyzing these surveys, economists in the Division of Consumer and Community Affairs published articles throughout the year in various publications and journals, contributing to body of research exploring issues impacting consumers and communities.[36]

Analysis of Emerging Issues

Board staff analyze data and anticipate trends, monitor legislative activity, form working groups, and organize expert roundtables to identify emerging consumer risks and inform supervision, research, and policy. In 2020, the Board analyzed a broad range of issues in financial services markets that potentially pose risks to consumers:

- **Consumer risk workshop:** Hosted a consumer risk-focused workshop in July for staff from across the Board, Reserve Banks, and other federal agencies. Discussion topics focused on balancing macro- and micro-consumer risks with data-driven tools and innovative techniques for identifying heightened risks to consumers.
- **Retail banking:** Published articles that explored two aspects of changes in retail banking: the implications of faster payments for cash-flow-constrained consumers and the emergence of online-only subsidiaries of traditional brick-and-mortar banks.[37]
- **Mortgage credit:** Analyzed the small-dollar mortgage market to understand the nature of banks' engagement in this sector and to assess opportunities for improving access to credit and reducing burden.
- **Housing:** Tracked general housing market trends, with a particular focus on the impact of COVID-19 on homeownership and rental housing, including risk of foreclosure and evictions.
- **Small business lending:** Monitored credit availability for smaller firms that often lack the financing options and in-house financial expertise of larger firms.

See box 6.2 for information about related publications presenting analyses of how consumers, communities, and community development organizations responded to the pandemic. Much of this work focused, in particular, on such issues as measuring the economic impact of the pandemic, the role and operations of community development financial institutions in responding to the pandemic, trends in complaints consumers had about their experiences with financial institutions, and survey results of organizations providing services to LMI communities during the pandemic.[38]

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[36] For papers by the Federal Reserve Board, see Theodore F. Figinski and Erin Troland, "Health Insurance and Hospital Supply: Evidence from 1950s Coal Country," FEDS working paper at https://www.federalreserve.gov/econres/feds/health-insurance-and-hospital-supply-evidence-from-1950s-coal-country.htm; and Jeff Larrimore and Erin Troland, "Improving Housing Payment Projections during the COVID-19 Pandemic," at https://www.federalreserve.gov/econres/notes/feds-notes/improving-housing-payment-projections-during-the-covid-19-pandemic-20201020.htm.

[37] For the articles, see the August 2020 edition of *Consumer and Community Context* at https://www.federalreserve.gov/publications/2020-August-consumer-community-context.htm.

[38] For the publication, see *Consumer & Community Context,* November 2020, at https://www.federalreserve.gov/publications/2020-November-consumer-community-context.htm.

Box 6.2. Meeting the Need for Real-Time Data and Insights on Consumers' Experiences

In mid-March, as the country confronted the public health crisis sparked by the coronavirus, federal, state, and local governments began issuing stay-at-home orders to contain the virus. Many businesses shuttered, workplaces and schools moved to full-time virtual operations, and consumers and communities were faced with financial uncertainty and loss of income.

As the magnitude of the potential economic fallout became clearer, the federal government and the Federal Reserve launched emergency programs to provide immediate relief by providing fiscal support to businesses and households so they could continue to meet financial obligations (see box 6.1). Given the sudden onset and unprecedented nature of this crisis, there were limited data available to guide policy; thus, policymakers sought to provide access to financial relief through many channels while simultaneously working to understand the issues that consumers and communities were facing.

To help gather real-time data and community-level insights to inform the Board's actions and decisions on how best to support the economic stability of consumers and communities, the Division of Consumer and Community Affairs (DCCA) throughout the year conducted targeted research, surveys, and data analysis as well as outreach to key community stakeholders.

Research, Data, and Analysis

To help provide insight into how households were faring financially, the Board issued two supplements to its annual Survey of Household Economic and Decisionmaking in April and July 2020, to update the 2019 survey. These additional surveys, each of just over 1,000 adults, focused on the labor market effects of households' overall financial circumstances amid closures and stay-at-home orders, which highlighted the impact of the pandemic's unprecedented financial disruptions on the economic well-being of U.S. adults and their families.[1] The April survey showed that a larger fraction of households were facing financial hardship than in the fall of 2019, with concentrations of those who had lost a job or had their hours cut reporting difficulty meeting financial obligations as a result of employment disruption.

Furthermore, Federal Reserve System Community Development Offices collaborated throughout 2020 to survey consumer groups, financial institutions, government agencies, and community organizations to understand the effects of COVID-19 on low- to moderate-income communities and the entities serving them. Analysis of four pulse surveys were published in a series of four reports entitled *Perspectives from Main Street: The Impact of COVID-19 on Low- to Moderate-Income Communities and the Entities Serving Them*.[2] Additional information and data on the challenges stemming from the COVID-19 crisis, as well as other community development issues, were shared through various Connecting Communities webinars.[3] And the Board's November 2020 issue of *Consumer and Community Context* compiled additional research and analysis on the impact of COVID-19.[4]

Outreach and Stakeholder Engagement

Because actions to protect public health were sudden and varied across states and localities, on-the-ground information was essential to informing how the Board weighed challenges confronting the economy, financial institutions, and consumers. To augment its community-level insights and feedback, the Board convened its network of bankers, community organizations, consumer advocates, and researchers so that they could share their perspectives with Board members and staff.

(continued on next page)

1 See https://www.federalreserve.gov/consumerscommunities/shed.htm.
2 See https://fedcommunities.org/data/main-street-covid19-survey-2020/.
3 See https://bsr.stlouisfed.org/connectingcommunities/.
4 See https://www.federalreserve.gov/publications/files/consumer-community-context-20201118.pdf.

Box 6.2. Meeting the Need for Real-Time Data and Insights on Consumers' Experiences—*continued*

In April, the Board convened a special meeting of the Community Advisory Council (CAC) to discuss the public health and economic impacts of the pandemic, with members sharing their organizations' experiences and observations. The regular May and October CAC provided additional opportunities for council members to share insights on challenges facing their communities, including supporting small businesses and nonprofits, addressing housing instability and food security, and understanding the impacts of these issues on economically vulnerable households.[5]

In addition, the Board also conducted outreach to a broad range of stakeholders, including financial institutions, community organizations, consumer groups, small businesses and nonprofits, throughout the year to gain their perspectives on trends and impacts they were seeing in their communities as they worked to respond to the rapid pace of change. This included convening a group to advise and encourage participation of community development financial institutions and minority depository institutions in the Paycheck Protection Program Lending Facility and Main Street Lending Program.[6] In addition, the Board posted resources for consumers, communities, and small businesses on its COVID-19 webpage (https://www.federalreserve.gov/covid-19.htm) for those seeking assistance through various programs.

[5] Records of meetings with the CAC are available at https://www.federalreserve.gov/aboutthefed/cac.htm.
[6] For access to webinars on these programs, see Ask the Fed at https://bsr.stlouisfed.org/askthefed/Home/AllCalls.

Community Development

The Federal Reserve System's Community Development function promotes economic growth and financial stability for underserved households and communities by informing research, policy, and action. Community Development is a decentralized function within the Federal Reserve System, and the Community Affairs Officers at each of the 12 Reserve Banks design strategies to respond to the specific needs in their respective Districts. Board staff provide oversight for alignment with Board objectives and coordination of System priorities.

Perspectives from Main Street

Through its work, the Community Development function also ensures the voices of consumers and communities inform policy and research and solicits diverse views on issues affecting the economy and financial markets. These perspectives help improve research, policies, and transparency.

To that end, the Board partnered with Reserve Banks in 2020 to gain insight into the impact of COVID-19 and how the many efforts to slow the spread of this disease affected communities across the nation. In order to obtain information, the Federal Reserve conducted four surveys on the effects of the coronavirus on communities and people in LMI households and the entities serving them.[39] Using a convenience sampling method that relied on contact databases, the online survey sought input from representatives of nonprofit organizations, financial institutions, government agencies, and other community organizations. Issued in April, June, August, and October, these surveys provided an insightful and informative snapshot into how COVID-19 was affecting LMI people and organizations that serve them on the dates the survey was administered. In addition, the findings of the survey were discussed in webinar series that featured experts from industry, government agencies, and community organizations. For more information on the results of the survey and on webinar series, see box 6.2.

Similarly, the Federal Reserve supports access to credit and financial services for communities of color by understanding and promoting the viability of minority depository institutions (MDIs). In 2020, in addition to releasing the Minority Depository Institutions (MDI) Annual Report to the Congress, the Board partnered with the Federal Reserve Bank of Kansas City on the development and promotion of a virtual conference, “Banking and the Economy: A Forum for Minorities in Banking.”[40] This forum was designed to provide leaders of minority banks with industry, leadership, and professional development knowledge that will enhance their careers and networks, in fulfillment of the Federal Reserve’s commitment to supporting the success of MDIs as vital contributors to the diverse landscape of banks and providers of financial services through its Partnership for Progress program.[41]

[39] To access the surveys, see https://fedcommunities.org/data/main-street-covid19-survey-2020/.

[40] For more information about the report to Congress and other activities relating to minority depository institutions, see https://www.federalreserve.gov/supervisionreg/minority-depository-institutions.htm. For more information about the forum, see https://www.stlouisfed.org/events/2019/09/cd-mbf0919.

[41] For more information about the Federal Reserve System’s Partnership for Progress, see https://fedpartnership.gov/.

Appendixes

A | Federal Reserve System Organization

Congress designed the Federal Reserve System to give it a broad perspective on the economy and on economic activity in all parts of the nation. As such, the System is composed of a central, governmental agency—the Board of Governors—in Washington, D.C., and 12 regional Federal Reserve Banks. This section lists key officials across the System, including the Board of Governors, its officers, Federal Open Market Committee members, several System councils, and Federal Reserve Bank and Branch directors and officers for 2020.

Board of Governors

Members

The Board of Governors of the Federal Reserve System is composed of seven members, who are nominated by the President and confirmed by the Senate. The Chair and the Vice Chair of the Board are also named by the President from among the members and are confirmed by the Senate. This section lists Board members who served in 2020. For a full listing of Board members from 1914 through the present, visit www.federalreserve.gov/aboutthefed/bios/board/boardmembership.htm.

Jerome H. Powell
Chair

Richard H. Clarida
Vice Chair

Randal K. Quarles
Vice Chair for Supervision

Michelle W. Bowman

Lael Brainard

Christopher J. Waller
(as of December 18, 2020)

Divisions and Officers

Fifteen divisions support and carry out the mission of the Board of Governors, which is based in Washington, D.C.

Office of Board Members

Michelle A. Smith
Assistant to the Board
and Director

Linda L. Robertson
Assistant to the Board

Lucretia M. Boyer
Assistant to the Board

David W. Skidmore
Assistant to the Board
(through February 1, 2020)

Jennifer C. Gallagher
Special Assistant to the Board
for Congressional Liaison

Jon Faust
Senior Special Adviser
to the Chair

Joshua H. Gallin
Special Adviser to the Chair

Legal Division

Mark E. Van Der Weide
General Counsel

Richard M. Ashton
Deputy General Counsel

Laurie S. Schaffer
Deputy General Counsel

Charles Gray
Senior Associate General Counsel and Chief of Staff
(as of March 19, 2020)

Stephanie Martin
Senior Associate General Counsel

Jean C. Anderson
Associate General Counsel

Benjamin W. McDonough
Associate General Counsel

Alvin Williams
Associate General Counsel
(as of August 31, 2020)

Alicia S. Foster
Deputy Associate General Counsel

Alison M. Thro
Deputy Associate General Counsel

Cary K. Williams
Deputy Associate General Counsel

Patrick M. Bryan
Assistant General Counsel
(through January 25, 2020)

Jason A. Gonzalez
Assistant General Counsel
(as of August 16, 2020)

Office of the Secretary

Ann Misback
Secretary of the Board

Margaret M. Shanks
Deputy Secretary

Michele T. Fennell
Deputy Associate Secretary

Yao-Chin Chao
Assistant Secretary

Division of International Finance

Beth Anne Wilson
Director
(as of June 1, 2020)

Shaghil Ahmed
Deputy Director

Sally M. Davies
Deputy Director

Brian M. Doyle[1]
Deputy Director

Joseph W. Gruber
Deputy Director
(through May 2, 2020)

Carol Bertaut
Senior Associate Director

James A. Dahl
Associate Director

Paul Wood
Associate Director

Ricardo Correa
Deputy Associate Director

Stephanie E. Curcuru
Deputy Associate Director

Matteo Iacoviello
Deputy Associate Director

Andrea Raffo
Deputy Associate Director

Daniel Beltran
Assistant Director
(as of June 21, 2020)

Viktors Stebunovs
Assistant Director
(as of June 21, 2020)

Robert Vigfusson
Assistant Director

Brett Berger
Senior Adviser

Steven B. Kamin
Senior Adviser
(through June 1, 2020)

John H. Rogers
Senior Adviser

[1] Brian M. Doyle served as an adviser to Vice Chair Clarida through April 2020 and was replaced by Chiara Scotti.

Division of Financial Stability

Andreas W. Lehnert
Director

Michael T. Kiley
Deputy Director

William F. Bassett
Senior Associate Director

Elizabeth Klee
Senior Associate Director

John W. Schindler
Senior Associate Director

Luca Guerrieri
Deputy Associate Director

Kent C. Hiteshew
Deputy Associate Director
(as of March 25, 2020)

Namirembe Mukasa
Deputy Associate and
Chief of Staff

Chiara Scotti[2]
Deputy Associate Director

Skander J. Van den Heuvel
Deputy Associate Director

David Arseneau
Assistant Director
(as of November 8, 2020)

Andrew M. Cohen
Assistant Director

Ceyhun Durdu
Assistant Director
(as of November 8, 2020)

Uzma Wahhab
Special Adviser

Division of Monetary Affairs

Thomas Laubach
Director
(through September 2, 2020)

Trevor A. Reeve
Director
(as of September 3, 2020)

James A. Clouse
Deputy Director

Rochelle M. Edge
Deputy Director

David H. Bowman
Senior Associate Director

Gretchen C. Weinbach
Senior Associate Director

Margaret G. DeBoer
Associate Director

Mary T. Hoffman
Associate Director

J. David Lopez-Salido
Associate Director

Matthew M. Luecke
Associate Director

Katherine Tom
Associate Director
(through October 11, 2020)

Min Wei
Associate Director

Eric C. Engstrom[3]
Deputy Associate Director

Christopher J. Gust
Deputy Associate Director

Brian Bonis
Assistant Director
(as of March 29, 2020)

Karen Brooks
Assistant Director

Michiel De Pooter
Assistant Director

Giovanni Favara
Assistant Director

Etienne Gagnon
Assistant Director

Dan Li
Assistant Director

Laura Lipscomb
Assistant Director

Elizabeth Marx
Assistant Director
(as of March 29, 2020)

Zeynep Senyuz
Assistant Director

Rebecca Zarutskie
Assistant Director

Antulio Bomfim[4]
Senior Adviser

Jane E. Ihrig
Senior Adviser

Don H. Kim
Senior Adviser

Ellen E. Meade
Senior Adviser

Edward M. Nelson
Senior Adviser

Robert J. Tetlow
Senior Adviser

Egon Zakrajsek
Senior Adviser

[2] Chiara Scotti replaced Brian M. Doyle as an adviser to Vice Chair Clarida in April 2020.
[3] Eric C. Engstrom served as a deputy associate director in Monetary Affairs and Research and Statistics.
[4] Antulio Bonfim also served as an adviser to Governor Bowman in 2020.

Division of Research and Statistics

Stacey Tevlin
Director

Jeffrey C. Campione
Deputy Director

Daniel M. Covitz
Deputy Director

William L. Wascher III
Deputy Director

Nicole Bennett
Senior Associate Director
(as of March 30, 2020)

Eric M. Engen
Senior Associate Director

Joshua H. Gallin
Senior Associate Director

Diana Hancock
Senior Associate Director

David E. Lebow
Senior Associate Director

Michael G. Palumbo
Senior Associate Director

John J. Stevens
Senior Associate Director

Glenn R. Follette
Associate Director

Elizabeth K. Kiser
Associate Director

Timothy A. Mullen
Associate Director

Burcu Duygan-Bump
Deputy Associate Director

Eric C. Engstrom[5]
Deputy Associate Director

J. Andrew Figura
Deputy Associate Director

Erik A. Heitfield
Deputy Associate Director

Patrick E. McCabe
Deputy Associate Director

Norman J. Morin
Deputy Associate Director

Karen M. Pence
Deputy Associate Director

John M. Roberts
Deputy Associate Director

Shane M. Sherlund
Deputy Associate Director

Lillian Shewmaker
Deputy Associate Director

Paul A. Smith
Deputy Associate Director

Gianni Amisano
Assistant Director and Chief

Matthias Paustian
Assistant Director and Chief

Paul Lengermann
Assistant Director

Geng Li
Assistant Director and Chief

Byron Lutz
Assistant Director

Raven Molloy
Assistant Director

Gustavo Suarez
Assistant Director

Clara Vega
Assistant Director

S. Wayne Passmore
Senior Adviser

Robin A. Prager
Senior Adviser
(through April 1, 2020)

Jeremy Rudd
Senior Adviser

Steven A. Sharpe
Senior Adviser

Charles Fleischman
Adviser

[5] Eric C. Engstrom served as a deputy associate director in Monetary Affairs and Research and Statistics.

Division of Supervision and Regulation

Michael S. Gibson
Director

Jennifer Burns
Deputy Director

Arthur W. Lindo
Deputy Director

James Price
Deputy Director

Mary L. Aiken
Senior Associate Director

Barbara J. Bouchard
Senior Adviser

Richard N. Ragan
Senior Associate Director

Lisa Ryu
Senior Associate Director

Todd Vermilyea
Senior Associate Director

Kevin M. Bertsch
Associate Director

Nida Davis
Associate Director

Christopher Finger
Associate Director

Jeffery Gunther
Associate Director

Anna L. Hewko
Associate Director

Michael J. Hsu
Associate Director

John Kolb
Associate Director
(through April 1, 2020)

Molly Mahar
Associate Director

Richard A. Naylor II
Associate Director

Thomas R. Sullivan
Associate Director

John Beebe
Deputy Associate Director

James Ray Diggs
Deputy Associate Director

Mona Elliot
Deputy Associate Director

Constance Horsley
Deputy Associate Director

Kavita Jain
Deputy Associate Director
(as of June 29, 2020)

Kathleen Johnson
Deputy Associate Director

Ryan P. Lordos
Deputy Associate Director

Lara Lylozian
Deputy Associate Director/
Chief Accountant

David K. Lynch
Deputy Associate Director

Susan Motyka
Deputy Associate Director

T. Kirk Odegard
Deputy Associate Director

Catherine Piche
Deputy Associate Director
(through March 1, 2020)

Laurie Priest
Deputy Associate Director
(through July 1, 2020)

Steven Spurry
Deputy Associate Director

Catherine A. Tilford
Deputy Associate Director

Joanne Wakim
Deputy Associate Director
(through July 1, 2020)

Donna Webb
Deputy Associate Director

Suzanne L. Williams
Deputy Associate Director

Dana Burnett
Assistant Director
(as of October 25, 2020)

Karen Caplan
Assistant Director

Juan Climent
Assistant Director
(as of June 7, 2020)

Keith Coughlin
Assistant Director

Christine Graham
Assistant Director

Eric L. Kennedy
Assistant Director
(as of April 26, 2020)

Keith A. Ligon
Assistant Director
(through June 1, 2020)

Ann McKeehan
Assistant Director

Brent Richards
Assistant Director

Vaishali Sack
Assistant Director

Emily Wells
Assistant Director
(as of November 8, 2020)

Robert Sarama
Assistant Director

Norah M. Barger
Senior Adviser

Robert T. Ashman
Adviser
(through October 1, 2020)

Fang Du
Adviser

William F. Treacy
Adviser

Division of Consumer and Community Affairs

Eric S. Belsky
Director

V. Nicole Bynum
Deputy Director

Anna Alvarez Boyd
Senior Associate Director

Suzanne G. Killian
Senior Associate Director
(through December 1, 2020)

Carol A. Evans
Associate Director

Joseph A. Firschein
Associate Director

Phyllis L. Harwell
Associate Director

Marisa A. Reid
Associate Director

David E. Buchholz
Deputy Associate Director

Angelyque Campbell
Assistant Director

Amy B. Henderson
Assistant Director

Minh-Duc T. Le
Assistant Director

Caterina Petrucco-Littleton
Assistant Director

Allen Fishbein
Senior Adviser
(through June 1, 2020)

Division of Reserve Bank Operations and Payment Systems

Matthew J. Eichner
Director

Marta E. Chaffee
Senior Associate Director

Gregory L. Evans
Senior Associate Director

Susan V. Foley
Senior Associate Director

Lawrence E. Mize
Senior Associate Director

Michael J. Lambert
Associate Director
(through November 1, 2020)

Jennifer K. Liu
Associate Director

Jennifer A. Lucier
Associate Director

David C. Mills
Associate Director

Timothy W. Maas
Deputy Associate Director

Stuart E. Sperry
Deputy Associate Director

Jeffrey Walker
Deputy Associate Director

Casey Clark
Assistant Director

Sonja Danburg
Assistant Director and Manager

Caio Peixoto
Assistant Director and Manager
(as of May 24, 2020)

Jason Hinkle
Assistant Director

Brian Lawler
Assistant Director

Mark Manuszak
Assistant Director

Travis D. Nesmith
Assistant Director and Chief

Mark J. Olechowski
Assistant Director

Rebecca L. Royer
Assistant Director

Nick Trotta
Assistant Director and Manager

Office of the Chief Operating Officer

Patrick J. McClanahan
Chief Operating Officer

Michael J. Kraemer
Chief Data Officer
(through May 1, 2020)

Katherine Tom
Chief Data Officer
(as of October 11, 2020)

Sheila Clark
Diversity and Inclusion
Programs Director

Andrew Leonard
Associate Director

Phillip C. Daher
Assistant Director

Jeffrey A. Monica
Assistant Director
(through July 1, 2020)

Steven Miranda
Adviser

Michell Clark
Senior Adviser
(through February 1, 2020)

Division of Financial Management

Ricardo Aguilera
Director and Chief
Financial Officer

Stephen J. Bernard
Deputy Director

Monica Y. Manning
Associate Director
(as of November 9, 2020)

Thomas Murphy
Deputy Associate Director
(as of March 2, 2020)

Jeffrey R. Peirce
Associate Director

Karen L. Vassallo
Associate Director

Kimberly Briggs
Assistant Director

Division of Management

Winona Varnon
Director

Tara Tinsley-Pelitere
Senior Associate Director

Tameika L. Pope
Senior Associate Director
and CTO

Curtis B. Eldridge
Senior Associate Director
and Chief

Ann Buckingham
Associate Director

Donna J. Butler
Deputy Associate Director and Chief
of Staff (as of January 21, 2020)

Kendra Gastright
Associate Director

Timothy E. Markey
Deputy Associate Director

Reginald V. Roach
Deputy Associate Director

Katherine Perez-Grines
Deputy Associate Director
and Assistant Chief

Keith F. Bates
Assistant Director

Catherine Jack
Assistant Director

Tim Ly
Assistant Director

Jeffrey A. Martin
Assistant Director
(through April 22, 2020)

Stephen E. Pearson
Assistant Director

Jacqueline Raia
Assistant Director
(through August 29, 2020)

Division of Information Technology

Sharon L. Mowry
Director

Lisa M. Bell
Deputy Director

Raymond Romero
Deputy Director

Kofi A. Sapong
Deputy Director

Glenn S. Eskow
Senior Associate Director

Stephen Olden
Senior Associate Director
(as of October 26, 2020)

Sheryl Lynn Warren
Senior Associate Director

Rajasekhar R. Yelisetty
Senior Associate Director

Charles B. Young
Associate Director

William K. Dennison
Deputy Associate Director

Deborah Prespare
Deputy Associate Director

Jonathan F. Shrier
Deputy Associate Director

Eric C. Turner
Deputy Associate Director

Virginia M. Wall
Deputy Associate Director

Brian Lester
Assistant Director

Amy Kelley
Assistant Director
(as of August 16, 2020)

Scott Meyerle
Assistant Director

Can Xuan Nguyen
Assistant Director

Langston Shaw
Assistant Director

Edgar Wang
Assistant Director

Ivan K. Wun
Assistant Director

Marietta Murphy
Adviser
(through August 1, 2020)

Theresa C. Palya
Adviser

Office of Inspector General

Mark Bialek
Inspector General

Fred Gibson
Deputy Inspector General

Gerald Maye
Associate Inspector General
(through May 1, 2020)

Peter Sheridan
Associate Inspector General

Michael VanHuysen
Associate Inspector General

Stephen Carroll
Deputy Associate
Inspector General

Cynthia Gray
Assistant Inspector General
(as of August 30, 2020)

Jacqueline M. Becker
Senior Adviser

Federal Open Market Committee

The Federal Open Market Committee is made up of the seven members of the Board of Governors; the president of the Federal Reserve Bank of New York; and four of the remaining eleven Federal Reserve Bank presidents, who serve one-year terms on a rotating basis. During 2020, the Federal Open Market Committee held eight regularly scheduled and two unscheduled meetings (see appendix B, "Minutes of Federal Open Market Committee Meetings").

Members

Jerome H. Powell
Chair, Board of Governors

John C. Williams
Vice Chairman, President, Federal Reserve Bank of New York

Michelle W. Bowman
Member, Board of Governors

Lael Brainard
Member, Board of Governors

Richard H. Clarida
Member, Board of Governors

Patrick T. Harker
President, Federal Reserve Bank of Philadelphia

Robert S. Kaplan
President, Federal Reserve Bank of Dallas

Neel Kashkari
President, Federal Reserve Bank of Minneapolis

Loretta J. Mester
President, Federal Reserve Bank of Cleveland

Randal K. Quarles
Member, Board of Governors

Alternate Members

Thomas Barkin
President, Federal Reserve Bank of Richmond

Raphael W. Bostic
President, Federal Reserve Bank of Atlanta

Mary C. Daly
President, Federal Reserve Bank of San Francisco

Charles L. Evans
President, Federal Reserve Bank of Chicago

Helen E. Mucciolo
First Vice President, Federal Reserve Bank of New York
(as of November 11, 2020)

Michael Strine
First Vice President, Federal Reserve Bank of New York
(through November 10, 2020)

Officers

James A. Clouse
Secretary

Matthew M. Luecke
Deputy Secretary

Michelle A. Smith
Assistant Secretary

Mark E. Van Der Weide
General Counsel

Michael A. Held
Deputy General Counsel

Richard M. Ashton
Assistant General Counsel

Thomas Laubach
Economist
(through September 1, 2020)

Trevor A. Reeve
Economist
(as of October 1, 2020)

Stacey Tevlin
Economist

Beth Anne Wilson
Economist

Shaghil Ahmed
Associate Economist

Michael Dotsey
Associate Economist

Rochelle M. Edge
Associate Economist
(as of October 1, 2020)

Marc P. Giannoni
Associate Economist

Joseph W. Gruber
Associate Economist

Beverly Hirtle
Associate Economist

David E. Lebow
Associate Economist

Ellis W. Tallman
Associate Economist

William L. Wascher
Associate Economist

Mark L.J. Wright
Associate Economist

Lorie K. Logan
Manager, System Open
Market Account

Board of Governors Advisory Councils

The Federal Reserve Board uses advisory committees in carrying out its varied responsibilities. To learn more, visit https://www.federalreserve.gov/aboutthefed/advisorydefault.htm.

Federal Advisory Council

The Federal Advisory Council—a statutory body established under the Federal Reserve Act—consults with and advises the Board of Governors on all matters within the Board's jurisdiction. It is composed of one representative from each Federal Reserve District, chosen by the Reserve Bank in that District. The president and vice president of the council are selected from amongst council members. The Federal Reserve Act requires the council to meet in Washington, D.C., at least four times a year. In 2020, the council met on February 5–6, May 7–8, September 16–17, and December 2–3. The council met with the Board on February 6, May 7, September 17, and December 3, 2020.

Members

District 1

John R. Ciulla
President and Chief Executive Officer, Webster Financial Corporation and Webster Bank, Waterbury, CT

District 2

Rene F. Jones
Chairman and Chief Executive Officer, M&T Bank Corporation, Buffalo, NY

District 3

Jeffrey M. Schweitzer
Chief Executive Officer, Univest Bank and Trust Co., Souderton, PA

District 4

William S. Demchak
Chairman, President and Chief Executive Officer, PNC Financial Services Group, Pittsburgh, PA

District 5

Brian T. Moynihan
Chairman and Chief Executive Officer, Bank of America, Charlotte, NC

District 6

Rajinder P. Singh
Chairman, President and Chief Executive Officer, BankUnited, Inc., Miami Lakes, FL

District 7

Jeffrey J. Brown
Chief Executive Officer, Ally Financial Inc., Detroit, MI

District 8

D. Bryan Jordan
Chairman, President and Chief Executive Officer, First Horizon National Corporation, Memphis, TN

District 9

Kevin P. Riley
President and Chief Executive Officer, First Interstate BancSystem, Inc., Billings, MT

District 10

John B. Dicus
President and Chief Executive Officer, Capitol Federal Financial, Inc., Topeka, KS

District 11

Phillip D. Green
Chairman and Chief Executive Officer, Cullen/Frost Bankers Inc., San Antonio, TX

District 12

James H. Herbert, II
Chairman and Chief Executive Officer, First Republic Bank, San Francisco, CA

Officers

Brian T. Moynihan
President

Jeffrey J. Brown
Vice President

Herb Taylor
Secretary

Community Depository Institutions Advisory Council

The Community Depository Institutions Advisory Council advises the Board of Governors on the economy, lending conditions, and other issues of interest to community depository institutions. Members are selected from among representatives of banks, thrift institutions, and credit unions who are serving on local advisory councils at the 12 Federal Reserve Banks. One member of each of the Reserve Bank councils serves on the Community Depository Institutions Advisory Council. The president and vice president are selected from amongst council members. The council usually meets with the Board twice a year in Washington, D.C. In 2020, the council met on April 1 and November 19.

Members

District 1

Dorothy A. Savarese
Chairman, President and Chief Executive Officer, Cape Cod 5, Orleans, MA

District 2

Faheem A. Masood
President and Chief Executive Officer, ESL Federal Credit Union, Rochester, NY

District 3

Jeane M. Vidoni
President and Chief Executive Officer, Penn Community Bank, Perkasie, PA

District 4

T. Michael Price
President and Chief Executive Officer, First Commonwealth Financial Corp., Indiana, PA

District 5

Dabney T.P. Gilliam, Jr.
President and Chief Executive Officer, The Bank of Charlotte County, Phenix, VA

District 6

David R. Melville III
President and Chief Executive Officer, b1Bank, Baton Rouge, LA

District 7

Douglas S. Gordon
President and Chief Executive Officer, WaterStone Bank, SSB, Wauwatosa, WI

District 8

Marnie Older
Chief Executive Officer and Director, Stone Bank, Little Rock, AR

District 9

Shari Laven
Chief Executive Officer, Viking Bank, Alexandria, MN

District 10

Brad Koehn
Regional President, Midwest Bank, Lincoln, NE

District 11

Erik Beguin
Founder and Chief Executive Officer, Austin Capital Bank, Austin, TX

District 12

Andrew J. Ryback
President and Chief Executive Officer, Plumas Bank, Quincy, CA

Officers

Dorothy A. Savarese
President

T. Michael Price
Vice President

Community Advisory Council

The Community Advisory Council was formed in 2015 to advise the Board of Governors on the economic circumstances and financial services needs of consumers and communities, with a particular focus on the concerns of low- and moderate-income populations. The council is composed of a diverse group of experts and representatives of consumer and community development organizations and interests, including from such fields as affordable housing, community and economic development, employment and labor, financial services and technology, small business, and asset and wealth building. One member of the council serves as its chair. The council first met with the Board in November 2015, and meets with the Board twice each year. In 2020, the council met with the Board on for a special meeting on COVID-19 on April 13 and held their regular meetings on May 14 and October 1.

Members

Juan Bonilla
Deputy Director, Lawrence Community Works, Lawrence, MA

Dr. Susan Bradbury
Professor, Community and Regional Planning, Iowa State University, Ames, IA

Tawney Brunsch
Executive Director, Lakota Funds, Kyle, SD

Adrian M. Brooks
CEO, Memorial Community Development Corporation, Evansville, IN

Joshua Downey
President, Denver Area Labor Federation, AFL-CIO, Denver, CO

Donald Hinkle-Brown
President and CEO, Reinvestment Fund, Philadelphia, PA

Barb Lau
Executive Director, Association of Women Contractors, St. Paul, MN

Stephanie Mackay
Chief Innovation Officer, Columbus Community Center, Salt Lake City, UT

Andreanecia Morris
Executive Director, HousingNOLA, New Orleans, LA

Marc Norman
Associate Professor of Practice, University of Michigan, Taubman College of Architecture and Urban Planning, Ann Arbor, MI

Jonny Price
Director of Business Development, Wefunder, San Francisco, CA

Bethany Sanchez
Fair Lending Director, Metropolitan Milwaukee Fair Housing Council, Milwaukee, WI

Bill Schlesinger
Co-Director, Project Vida, El Paso, TX

Lora Smith
Executive Director, Appalachian Impact Fund, Hazard, KY

Jesse Van Tol
CEO, National Community Reinvestment Coalition, Washington, DC

Officers

Donald Hinkle-Brown
Chair

Marc Norman
Vice Chair

Model Validation Council

The Model Validation Council was established in 2012 by the Board of Governors to provide expert and independent advice on its process to rigorously assess the models used in stress tests of banking institutions. The Dodd-Frank Wall Street Reform and Consumer Protection Act required the Federal Reserve to conduct annual stress tests of large bank holding companies and systemically important, nonbank financial institutions supervised by the Board. The Model Validation Council provides input on the Board's efforts to assess the effectiveness of the models used in the stress tests. The council is intended to improve the quality of the Federal Reserve's model assessment program and to strengthen the confidence in the integrity and independence of the program.

Members

Andrew Atkeson
Professor, University of California, Los Angeles

Paul Glasserman
Professor, Columbia University

Victoria Ivashina
Professor, Harvard Business School

Stijn Van Nieuwerburgh
Professor, Columbia University

Andrew Patton
Professor, Duke University

Federal Reserve Banks and Branches

To carry out the day-to-day operations of the Federal Reserve System, the nation has been divided into 12 Federal Reserve Districts, each with a Reserve Bank. The majority of Reserve Banks also have at least one Branch.

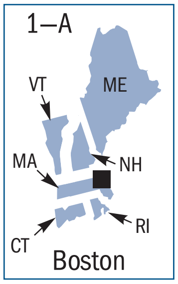
Reserve Bank and Branch Directors

As required by the Federal Reserve Act, each Federal Reserve Bank is supervised by a nine-member board with three different classes of three directors each: Class A directors, who are nominated and elected by the member banks in that District to represent the stockholding banks; Class B directors, who are nominated and elected by the member banks to represent the public; and Class C directors, who are appointed by the Board of Governors to represent the public. Class B and Class C directors are selected with due, but not exclusive, consideration to the interests of agriculture, commerce, industry, services, labor, and consumers. Each Federal Reserve Bank Branch also has a board with either five or seven directors. A majority of the directors on each Branch board are appointed by the Federal Reserve Bank, with the remaining directors appointed by the Board of Governors.

For more information on Reserve Bank and Branch directors, see https://www.federalreserve.gov/aboutthefed/directors/about.htm.

Reserve Bank and Branch directors are listed below. For each director, the class of directorship, the director's principal place of business, and the expiration date of the director's current term are shown. Also shown are maps that identify Federal Reserve Districts by their official number, city, and letter designation. For more information on the Federal Reserve indicator letters, see https://www.uscurrency.gov/denominations/bank-note-identifiers.

District 1–Boston



Covers the states of Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; and all but Fairfield County in Connecticut.

For more information on this District and to learn more about the Federal Reserve Bank of Boston's operations, visit https://www.bostonfed.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/bostonfinstmt2020.pdf.

Class A

Michael E. Tucker, 2020
President and Chief Executive Officer, Greenfield Cooperative Bank, Greenfield, MA

Chandler Howard, 2021
Retired President and Chief Executive Officer, Liberty Bank, Middletown, CT

Bruce Van Saun, 2022
Chairman and Chief Executive Officer, Citizens Financial Group, Providence, RI

Class B

Kimberly Sherman Stamler, 2020, President, Related Beal, Boston, MA

Roger W. Crandall, 2021
Chairman, President, and Chief Executive Officer, MassMutual Financial Group, Springfield, MA

Lizanne Kindler, 2022
Chief Executive Officer, Talbots, Hingham, MA

Class C

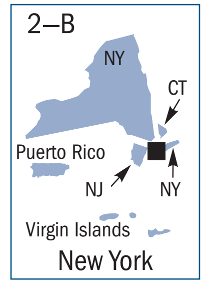
Kathleen E. Walsh, 2020
President and Chief Executive Officer, Boston Medical Center, Boston, MA

Phillip L. Clay, 2021
Professor Emeritus of City Planning, Massachusetts Institute of Technology, Cambridge, MA

Christina Hull Paxson, 2022
President, Brown University, Providence, RI

District 2–New York

Covers the state of New York; Fairfield County in Connecticut; and 12 counties in northern New Jersey, and serves the Commonwealth of Puerto Rico and the U.S. Virgin Islands.



For more information on this District and to learn more about the Federal Reserve Bank of New York's operations, visit https://www.newyorkfed.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/newyorkfinstmt2020.pdf.

Class A

Paul P. Mello, 2020
President and Chief Executive Officer, Solvay Bank, Solvay, NY

James P. Gorman, 2021
Chairman and Chief Executive Officer, Morgan Stanley, New York, NY

Douglas L. Kennedy, 2022
President and Chief Executive Officer, Peapack-Gladstone Bank, Bedminster, NJ

Class B

Vacancy, 2020

Glenn H. Hutchins, 2021
Chairman, North Island, and Co-Founder, Silver Lake, New York, NY

Adena T. Friedman, 2022
President and Chief Executive Officer, Nasdaq, New York, NY

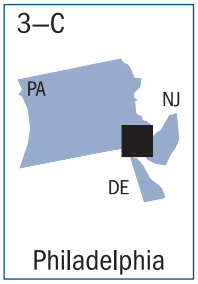
Class C

Rosa Gil, 2020
Founder, President, and Chief Executive Officer, Comunilife, Inc., New York, NY

Vincent Alvarez, 2021
President, New York City Central Labor Council, AFL-CIO, New York, NY

Denise Scott, 2022
Executive Vice President, Local Initiatives Support Corporation, New York, NY

District 3–Philadelphia



Covers the state of Delaware; nine counties in southern New Jersey; and 48 counties in the eastern two-thirds of Pennsylvania.

For more information on this District and to learn more about the Federal Reserve Bank of Philadelphia's operations, visit https://www.philadelphiafed.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/philadelphiafinstmt2020.pdf.

Class A

Jon S. Evans, 2020
President and Chief Executive Officer, Atlantic Community Bankers Bank, Camp Hill, PA

Timothy Snyder, 2021
President and Chief Executive Officer, Fleetwood Bank, Fleetwood, PA

Christopher D. Maher, 2022
Chairman and Chief Executive Officer, OceansFirst Bank, N.A., Toms River, NJ

Class B

Patricia Hasson, 2020
Retired President and Executive Director, Clarifi, Philadelphia, PA

Julia H. Klein, 2021
Chairwoman and Chief Executive Officer, C. H. Briggs Company, Reading, PA

John Fry, 2022
President, Drexel University, Philadelphia, PA

Class C

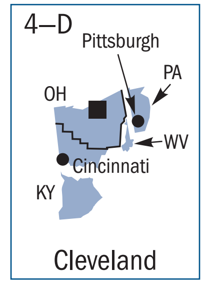
Madeline Bell, 2020
President and Chief Executive Officer, The Children's Hospital of Philadelphia–CHOP, Philadelphia, PA

Vacancy, 2021

Anthony Ibarguen, 2022
Chief Executive Officer, Quench USA, Inc., King of Prussia, PA

District 4–Cleveland

Covers the state of Ohio; 56 counties in eastern Kentucky; 19 counties in western Pennsylvania; and 6 counties in northern West Virginia.



For more information on this District and to learn more about the Federal Reserve Bank of Cleveland's operations, visit https://www.clevelandfed.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/clevelandfinstmt2020.pdf.

Class A

Dean J. Miller, 2020
President and Chief Executive Officer, First National Bank of Bellevue, Bellevue, OH

Eddie L. Steiner, 2021
President and Chief Executive Officer, CSB Bancorp, Inc., Millersburg, OH

Amy G. Brady, 2022
Chief Information Officer and Executive Vice President, KeyBank, Cleveland, OH

Class B

Charles H. Brown, 2020
Retired Executive Adviser, Toyota Motor North America, Erlanger, KY

Valarie L. Sheppard, 2021
Controller, Treasurer, and Executive Vice President-Company Transition Leader, The Procter & Gamble Company, Cincinnati, OH

David Megenhardt, 2022
Executive Director, United Labor Agency, Cleveland, OH

Class C

Doris Carson Williams, 2020
President and Chief Executive Officer, African American Chamber of Commerce of Western Pennsylvania, Pittsburgh, PA

Dawne S. Hickton, 2021
Executive Vice President and Chief Operating Officer, Critical Mission, Jacobs, Pittsburgh, PA

Dwight E. Smith, 2022
President and Chief Executive Officer, Sophisticated Systems, Inc., Columbus, OH

Cincinnati Branch

Appointed by the Federal Reserve Bank

Alfonso Cornejo, 2020
President, Hispanic Chamber Cincinnati USA, Cincinnati, OH

David C. Evans, 2020
President and Chief Executive Officer, TESSEC LLC, Dayton, OH

Tucker Ballinger, 2021
President and Chief Executive Officer, Forcht Bank, N.A., Lexington, KY

Darin C. Hall, 2022
President and Chief Executive Officer, Civitas Development Group, Cincinnati, OH

Appointed by the Board of Governors

Jenell R. Ross, 2020
President, Bob Ross Auto Group, Centerville, OH

Rachid Abdallah, 2021
Chairman and Chief Executive Officer, Jedson Engineering, Cincinnati, OH

Holly B. Wiedemann, 2022
Founder and President, AU Associates, Inc., Lexington, KY

Pittsburgh Branch

Appointed by the Federal Reserve Bank

Audrey Dunning, 2020
President and Chief Executive Officer, AMP Growth Advisors, LLC, Cranberry Township, PA

Robert I. Glimcher, 2020
President, Glimcher Group Inc., Pittsburgh, PA

Vera Krekanova, 2021
Chief Strategy and Research Officer, Allegheny Conference on Community Development, Pittsburgh, PA

Shelley L. Fant, 2022
President and Chief Executive Officer, FCG Solutions, Inc., Pittsburgh, PA

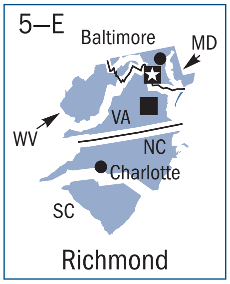
Appointed by the Board of Governors

Suzanne Mellon, 2020
President, Carlow University, Pittsburgh, PA

Dmitri D. Shiry, 2021
Retired Partner Deloitte-Pittsburgh, Deloitte LLP, Pittsburgh, PA

Kathryn Z. Klaber, 2022
Managing Partner, The Klaber Group, Sewickley, PA

District 5–Richmond



Covers the states of Maryland, Virginia, North Carolina, and South Carolina; 49 counties constituting most of West Virginia; and the District of Columbia.

For more information on this District and to learn more about the Federal Reserve Bank of Richmond's operations, visit https://www.richmondfed.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/richmondfinstmt2020.pdf.

Class A

Robert R. Hill, Jr., 2020
Chief Executive Officer, South State Corporation, Columbia, SC

James H. Sills, III, 2021
President and Chief Executive Officer, Mechanics and Farmers Bank, Durham, NC

William A. Loving, Jr., 2022
President and Chief Executive Officer, Pendleton Community Bank, Franklin, WV

Class B

Thomas C. Nelson, 2020
Chairman, President, and Chief Executive Officer, National Gypsum Company, Charlotte, NC

Catherine A. Meloy, 2021
President and Chief Executive Officer, Goodwill of Greater Washington/ Goodwill Excel Center, Washington, DC

Wayne A. I. Frederick, MD, 2022, President, Howard University, Washington, DC

Class C

Kathy J. Warden, 2020
Chief Executive Officer and President, Northrop Grumman Corporation, Falls Church, VA

Eugene A. Woods, 2021
President and Chief Executive Officer, Atrium Health, Charlotte, NC

Jodie McLean, 2022
Chief Executive Officer, EDENS, Washington, DC

Baltimore Branch

Appointed by the Federal Reserve Bank

Richard Lloyd Willey, 2020
President, Perdue Agribusiness, LLC, Salisbury, MD

Laura L. Gamble, 2021
Regional President Greater Maryland, PNC, Baltimore, MD

Tom Geddes, 2021
Partner and Portfolio Manager, Brown Advisory, Baltimore, MD

Cecilia A. Hodges, 2022
Regional President Greater Washington and Virginia, M&T Bank, Falls Church, VA

Appointed by the Board of Governors

Susan J. Ganz, 2020
Chief Executive Officer, Lion Brothers Company, Inc., Owings Mills, MD

Kenneth R. Banks, 2021
President and Chief Executive Officer, Banks Contracting Company, Greenbelt, MD

William J. McCarthy, 2022
Executive Director, Catholic Charities of Baltimore, Baltimore, MD

Charlotte Branch

Appointed by the Federal Reserve Bank

Sepideh Saidi, 2020
President and Chief Executive Officer, SEPI Inc., Raleigh, NC

Michael D. Garcia, 2021
President, Pulp and Paper Division, Domtar Corp., Fort Mill, SC

Jerry L. Ocheltree, 2021
President and Chief Executive Officer, United Bank, Lincolnton, NC

Michael C. Crapps, 2022
President and Chief Executive Officer, First Community Bank, Lexington, SC

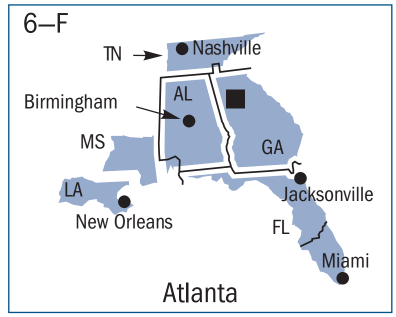
Appointed by the Board of Governors

R. Glenn Sherrill, Jr., 2020
Chairman and Chief Executive Officer, SteelFab Inc., Charlotte, NC

Bernette William Mazyck, 2021, President and Chief Executive Officer, South Carolina Association for Community Economic Development, Charleston, SC

Vacancy, 2022

District 6–Atlanta



Covers the states of Alabama, Florida, and Georgia; 74 counties in the eastern two-thirds of Tennessee; 38 parishes of southern Louisiana; and 43 counties of southern Mississippi.

For more information on this District and to learn more about the Federal Reserve Bank of Atlanta's operations, visit https://www.frbatlanta.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/atlantafinstmt2020.pdf.

Class A

Kessel D. Stelling, Jr., 2020
Chairman and Chief Executive Officer, Synovus Financial Corporation, Columbus, GA

Claire W. Tucker, 2021
Chief Executive Officer, CapStar Financial Holdings, Inc., Nashville, TN

Robert W. Dumas, 2022
Chairman, President, and Chief Executive Officer, AuburnBank, Auburn, AL

Class B

Jonathan T.M. Reckford, 2020
Chief Executive Officer, Habitat for Humanity International, Atlanta, GA

Michael Russell, 2021
Chief Executive Officer, H.J. Russell and Company, Atlanta, GA

Mary A. Laschinger, 2022
Former Chairman and Chief Executive Officer, Veritiv Corporation, Atlanta, GA

Class C

Myron A. Gray, 2020
Retired President, U.S. Operations, United Parcel Service, Inc., Atlanta, GA

Claire Lewis Arnold, 2021
Chief Executive Officer, Leapfrog Services, Inc., Atlanta, GA

Elizabeth A. Smith, 2022
Former Executive Chair, Bloomin' Brands, Inc., Tampa, FL

Birmingham Branch

Appointed by the Federal Reserve Bank

Herschell L. Hamilton, 2020
Chief Strategic Officer, BLOC Global Group, Birmingham, AL

David M. Benck, 2021
Vice President and General Counsel, Hibbett Sports, Birmingham, AL

David L. Nast, 2021
President and Chief Executive Officer, Progress Bank, Huntsville, AL

Brian C. Hamilton, 2022
President and Chief Executive Officer, Trillion Communications Corp., Bessemer, AL

Appointed by the Board of Governors

Nancy C. Goedecke, 2020
Chairman and Chief Executive Officer, Mayer Electric Supply Company, Inc., Birmingham, AL

Christy Thomas, 2021
Chief Financial Officer, Milo's Tea Company, Inc., Bessemer, AL

Merrill H. Stewart, Jr., 2022
President, The Stewart/Perry Company, Inc., Birmingham, AL

Jacksonville Branch

Appointed by the Federal Reserve Bank

William O. West, 2020
Chief Executive Officer, The Bank of Tampa, Tampa, FL

John Hirabayashi, 2021
President and Chief Executive Officer, Community First Credit Union of Florida, Jacksonville, FL

Dawn Lockhart, 2021
Director of Strategic Partnerships, Office of the Mayor, City of Jacksonville, Jacksonville, FL

Paul G. Boynton, 2022
President and Chief Executive Officer, Rayonier Advanced Materials, Inc., Jacksonville, FL

Appointed by the Board of Governors

Troy D. Taylor, 2020
Chairman and Chief Executive Officer, Coca-Cola Beverages Florida, LLC, Tampa, FL

Timothy P. Cost, 2021
President, Jacksonville University, Jacksonville, FL

Nicole B. Thomas, 2022
Hospital President, Baptist Medical Center South, Jacksonville, FL

Miami Branch

Appointed by the Federal Reserve Bank

N. Maria Menendez, 2020
Chief Financial Officer, GL Homes of Florida Holding, Sunrise, FL

Victoria E. Villalba, 2020
President and Chief Executive Officer, Victoria & Associates Career Services, Inc., Miami, FL

Abel L. Iglesias, 2021
President and Chief Operating Officer, Professional Bank, Coral Gables, FL

Eduardo Arriola, 2022
Chairman and Chief Executive Officer, Apollo Bank, Miami, FL

Appointed by the Board of Governors

Keith T. Koenig, 2020
President and Chief Executive Officer, City Furniture, Tamarac, FL

Michael A. Wynn, 2021
Board Chairman and President, Sunshine Ace Hardware, Bonita Springs, FL

Ana M. Menendez, 2022
Chief Financial Officer and Treasurer, Watsco, Inc., Miami, FL

Nashville Branch

Appointed by the Federal Reserve Bank

John W. Garratt, 2020
Executive Vice President and Chief Financial Officer, Dollar General, Goodlettsville, TN

Beth R. Chase, 2021
Former Senior Managing Director, Ankura Consulting Group, Nashville, TN

Leif M. Murphy, 2021
Chief Executive Officer, TeamHealth Holdings, Inc., Knoxville, TN

Amber W. Krupacs, 2022
Chief Financial Officer and Executive Vice President, Clayton Homes, Maryville, TN

Appointed by the Board of Governors

Amanda Mathis, 2020
Chief Financial Officer, Bridgestone Americas, Inc., Nashville, TN

Thomas Zacharia, 2021
Laboratory Director/ President and Chief Executive Officer, Oak Ridge National Laboratory/ UT-Battelle, LLC, Oak Ridge, TN

Matthew S. Bourlakas, 2022
President and Chief Executive Officer, Goodwill Industries of Middle Tennessee, Inc., Nashville, TN

New Orleans Branch

Appointed by the Federal Reserve Bank

Lampkin Butts, 2020
President and Chief Operating Officer, Sanderson Farms, Inc., Laurel, MS

Katherine A. Crosby, 2021
Board Chair, Fidelity Bank, New Orleans, LA

David T. Darragh, 2021
Operating Partner, LongueVue Capital, Metairie, LA

Toni D. Cooley, 2022
Chief Executive Officer, Systems Companies, Jackson, MS

Appointed by the Board of Governors

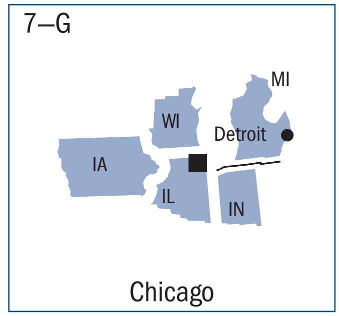
Michael E. Hicks, Jr., 2020
President and Chief Executive Officer, Hixardt Technologies, Inc., Pensacola, FL

Art E. Favre, 2021
President and Chief Executive Officer, Performance Contractors, Inc., Baton Rouge, LA

G. Janelle Frost, 2022
President and Chief Executive Officer, AMERISAFE, Inc., DeRidder, LA

District 7–Chicago

Covers the state of Iowa; 68 counties of northern Indiana; 50 counties of northern Illinois; 68 counties of southern Michigan; and 46 counties of southern Wisconsin.



For more information on this District and to learn more about the Federal Reserve Bank of Chicago's operations, visit https://www.chicagofed.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/chicagofinstmt2020.pdf.

Class A

Michael O'Grady, 2020
Chairman, President, and Chief Executive Officer, Northern Trust, Chicago, IL

Christopher J. Murphy III, 2021
Chairman and Chief Executive Officer, 1st Source Bank, South Bend, IN

Susan Whitson, 2022
Chief Executive Officer, First National Bank, and President, First of Waverly Corporation, Waverly, IA

Class B

David Cyril Habiger, 2020
President and Chief Executive Officer, J.D. Power, Troy, MI

Susan M. Collins, 2021
Interim Provost and Executive Vice President for Academic Affairs, University of Michigan, Ann Arbor, MI

Linda Jojo, 2022
Executive Vice President, Technology and Chief Digital Officer, United Airlines, Inc., Chicago, IL

Class C

E. Scott Santi, 2020
Chairman and Chief Executive Officer, Illinois Tool Works Inc., Glenview, IL

Wright L. Lassiter III, 2021
President and Chief Executive Officer, Henry Ford Health System, Detroit, MI

Helene D. Gayle, 2022
President and Chief Executive Officer, The Chicago Community Trust, Chicago IL

Detroit Branch

Appointed by the Federal Reserve Bank

Sandy K. Baruah, 2020
President and Chief Executive Officer, Detroit Regional Chamber, Detroit, MI

Sandra E. Pierce, 2020
Chairman & Senior Executive Vice President, Private Client Group and Regional Banking Director, Huntington Michigan, Southfield, MI

Rip Rapson, 2021
President and Chief Executive Officer, The Kresge Foundation, Troy, MI

Ronald E. Hall, 2022
President and Chief Executive Officer, Bridgewater Interiors, LLC, Detroit, MI

Appointed by the Board of Governors

Joseph B. Anderson, Jr., 2020
Chairman and Chief Executive Officer, TAG Holdings, LLC, Wixom, MI

James M. Nicholson, 2021
Co-Chairman, PVS Chemicals, Inc., Detroit, MI

Linda P. Hubbard, 2022
President and Chief Operating Officer, Carhartt, Inc., Dearborn, MI

District 8–St. Louis

Covers the state of Arkansas; 44 counties in southern Illinois; 24 counties in southern Indiana; 64 counties in western Kentucky; 39 counties in northern Mississippi; 71 counties in central and eastern Missouri; the city of St. Louis; and 21 counties in western Tennessee.

For more information on this District and to learn more about the Federal Reserve Bank of St. Louis's operations, visit https://www.stlouisfed.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/stlouisfinstmt2020.pdf.

Class A

Elizabeth G. McCoy, 2020
President and Chief Executive Officer, Planters Bank, Hopkinsville, KY

Patricia L. Clarke, 2021
President and Chief Executive Officer, First National Bank of Raymond, Raymond, IL

C. Mitchell Waycaster, 2022
President and Chief Executive Officer, Renassant Bank, Tupelo, MS

Class B

John N. Roberts III, 2020
President and Chief Executive Officer, J.B. Hunt Transport Services, Inc., Lowell, AR

Alice K. Houston, 2021
Chief Executive Officer, HJI Supply Chain Solutions, Louisville, KY

Penelope Pennington, 2022
Managing Partner, Edward Jones, St. Louis, MO

Class C

James M. McKelvey, Jr., 2020
Chief Executive Officer, Invisibly, Inc., St. Louis, MO

Suzanne Sitherwood, 2021
President and Chief Executive Officer, Spire Inc., St. Louis, MO

Carolyn Chism Hardy, 2022
President and Chief Executive Officer, Chism Hardy Investments, LLC, Collierville, TN

Little Rock Branch

Appointed by the Federal Reserve Bank

Keith Glover, 2020
President and Chief Executive Officer, Producers Rice Mill, Inc., Stuttgart, AR

Karama Neal, 2020
President, Southern Bancorp Community Partners, Little Rock, AR

Jeff Lynch, 2021
President and Chief Executive Officer, Eagle Bank and Trust, Little Rock, AR

R. Andrew Clyde, 2022
President and Chief Executive Officer, Murphy USA Inc., El Dorado, AR

Appointed by the Board of Governors

Vickie D. Judy, 2020
Chief Financial Officer and Vice President, America's Car-Mart, Inc, Bentonville, AR

Jamie Henry, 2021
Vice President Finance, Emerging Payments, Walmart Inc., Bentonville, AR

Millie A. Ward, 2022
President, Stone Ward, Little Rock, AR

Louisville Branch

Appointed by the Federal Reserve Bank

Tara England Barney, 2020
President and Chief Executive Officer, Southwest Indiana Chamber of Commerce, Evansville, IN

Blake B. Willoughby, 2020
President, First Breckinridge Bancshares, Inc., Irvington, KY

Ben Reno-Weber, 2021
Project Director, Greater Louisville Project, Louisville, KY

Patrick J. Glotzbach, 2022
Director, New Independent Bancshares, Inc., Charlestown, IN

Appointed by the Board of Governors

Sadiqa N. Reynolds, 2020
President and Chief Executive Officer, Louisville Urban League, Louisville, KY

Emerson M. Goodwin, 2021
Vice President of Operations, ARcare d/b/a KentuckyCare, Paducah, KY

David Tatman, 2022
Director of Engineering, Bendix Spicer Foundation Brake, LLC,
Bowling Green, KY

Memphis Branch

Appointed by the Federal Reserve Bank

Michael E. Cary, 2020
President and Chief Executive Officer, Carroll Bank and Trust, Huntingdon, TN

Michael Ugwueke, 2020
President and Chief Executive Officer, Methodist Le Bonheur Healthcare,
Memphis, TN

Beverly Crossen, 2021
Owner, Farmhouse Tupelo, Tupelo, MS

R. Davy Carter, 2022
Regional President, Home BancShares, Inc., Jonesboro, AR

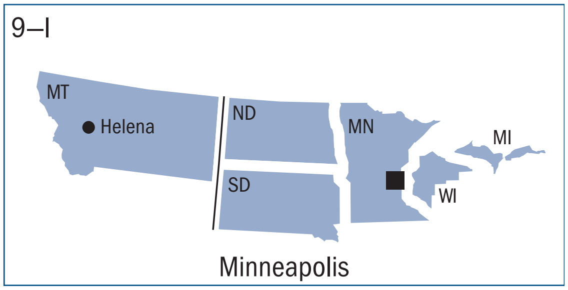
Appointed by the Board of Governors

David T. Cochran, Jr., 2020
Partner, CoCo Planting Co., Avon, MS

Eric D. Robertson, 2021
President, Community LIFT Corporation, Memphis, TN

Katherine Buckman Gibson,
2022, Chief Executive Officer,
KBG Technologies, LLC,
Memphis, TN

District 9–Minneapolis



Covers the states of Minnesota, Montana, North Dakota, and South Dakota; the Upper Peninsula of Michigan; and 26 counties in northern Wisconsin.

For more information on this District and to learn more about the Federal Reserve Bank of Minneapolis's operations, visit https://www.minneapolisfed.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/minneapolisfinstmt2020.pdf.

Class A

Thomas W. Armstrong, 2020
Senior Vice President/Market President, Forward Bank, Park Falls, WI

Jeanne H. Crain, 2021
President and Chief Executive Officer, Bremer Financial Corporation, St. Paul, MN

Brenda K. Foster, 2022
Chairman, President, and Chief Executive Officer, First Western Bank and Trust, Minot, ND

Class B

Kathleen Neset, 2020
President, Neset Consulting Service, Tioga, ND

Sarah Walsh, 2021
Chief Operating Officer, PayneWest Insurance, Helena, MT

David R. Emery, 2022
Executive Chairman, Retired, Black Hills Corporation, Rapid City, South Dakota

Class C

Srilata Zaheer, 2020
Dean, Carlson School of Management, University of Minnesota, Minneapolis, MN

Harry D. Melander, 2021
President, Minnesota Building and Construction Trades Council, St. Paul, MN

Christopher M. Hilger, 2022
Chairman, President, and Chief Executive Officer, Securian Financial, St. Paul, MN

Helena Branch

Appointed by the Federal Reserve Bank

William E. Coffee, 2020
Chief Executive Officer, Stockman Financial Corporation, Billings, MT

Jason Adams, 2021
Chief Financial Officer, Energy Keepers, Inc., Polson, MT

Mary Rutherford, 2022
President and Chief Executive Officer, Montana Community Foundation, Helena, MT

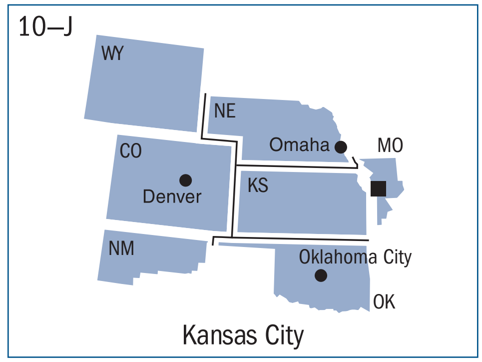
Appointed by the Board of Governors

Norma Nickerson, 2020
Director, Institute for Tourism & Recreation Research, University of Montana, Missoula, MT

Bobbi Wolstein, 2021
Chief Financial Officer, LHC, Inc., Kalispell, MT

District 10–Kansas City

Covers the states of Colorado, Kansas, Nebraska, Oklahoma, and Wyoming; 43 counties in western Missouri; and 14 counties in northern New Mexico.



For more information on this District and to learn more about the Federal Reserve Bank of Kansas City's operations, visit https://www.kansascityfed.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/kansascityfinstmt2020.pdf.

Class A

Patricia J. Minard, 2020
Chairman, President, and Chief Executive Officer, Southwest National Bank, Wichita, KS

Kyle Heckman, 2021
Chairman, President, and Chief Executive Officer, Flatirons Bank, Boulder, CO

Gregory Hohl, 2022
Chairman and President, Wahoo State Bank, Wahoo, NE

Class B

Lilly Marks, 2020
Vice President for Health Affairs, University of Colorado and Anschutz Medical Campus, Aurora, CO

Brent A. Stewart, Sr., 2021
President and Chief Executive Officer, United Way of Greater Kansas City, Kansas City, MO

Douglas J. Stussi, 2022
Executive Vice President and Managing Director, Love Family Office, Oklahoma City, OK

Class C

James C. Farrell, 2020
President, Farrell Growth Group LLC, Omaha, NE

Edmond Johnson, 2021
President and Owner, Premier Manufacturing, Inc., Frederick, CO

Patrick A. Dujakovich, 2022
President, Greater Kansas City AFL-CIO, Kansas City, MO

Denver Branch

Appointed by the Federal Reserve Bank

Ashley J. Burt, 2020
President and Chief Executive Officer, The Gunnison Bank and Trust Company, Gunnison, CO

Nicole Glaros, 2021
Chief Investment Strategy Officer, Techstars, Boulder, CO

Chris Wright, 2021
Chief Executive Officer, Liberty Oilfield Services, Denver, CO

Jeffrey C. Wallace, 2022
Chief Executive Officer, Wyoming Bank & Trust, Cheyenne, WY

Appointed by the Board of Governors

Navin Dimond, 2020
Chief Executive Officer, Stonebridge Companies, Denver, CO

Jacqueline Baca, 2021
President, Bueno Foods, Albuquerque, NM

Taryn Christison, 2022
Owner, Zimmerman Metals, Denver, CO

Oklahoma City Branch

Appointed by the Federal Reserve Bank

Brady Sidwell, 2020
Owner and Principal, Sidwell Strategies, LLC, Enid, OK

J. Walter Duncan IV, 2021
President, Duncan Oil Properties, Inc., Oklahoma City, OK

Susan Chapman Plumb, 2022
Board Chair and Chief Executive Officer, Bank of Cherokee County, Tahlequah, OK

Christopher C. Turner, 2022
President and Chief Financial Officer, The First State Bank, Oklahoma City, OK

Appointed by the Board of Governors

Katrina Washington, 2020
Owner, Stratos Realty Group, Oklahoma City, OK

Tina Patel, 2021
Chief Financial Officer, Promise Hotels, Inc., Tulsa, OK

Dana S. Weber, 2022
Chief Executive Officer and Chairman of the Board, Webco Industries, Inc., Sand Springs, OK

Omaha Branch

Appointed by the Federal Reserve Bank

Dwayne W. Sieck, 2020
President, Middle Market Banking, CIT, Omaha, NE

Thomas J. Henning, 2021
President and Chief Executive Officer, Cash-Wa Distributing Co., Kearney, NE

Zac Karpf, 2021
Chief Operating Officer, Platte Valley Bank, Scottsbluff, NE

Annette Hamilton, 2022
Chief Operating Officer, Ho-Chunk, Inc., Winnebago, NE

Appointed by the Board of Governors

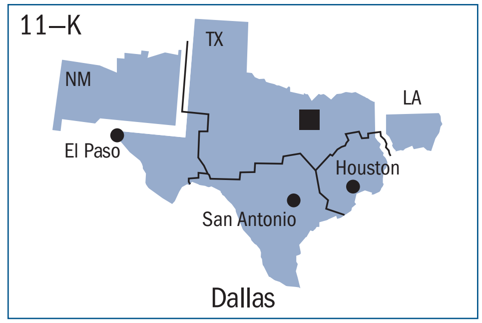
Eric L. Butler, 2020
Retired Executive Vice President and Chief Administrative Officer, Union Pacific Railroad, Omaha, NE

Kimberly A. Russel, 2021
Chief Executive Officer, Russel Advisors, Lincoln, NE

L. Javier Fernandez, 2022
Chief Financial Officer, Omaha Public Power District, Omaha, NE

District 11–Dallas

Covers the state of Texas; 26 parishes in northern Louisiana; and 18 counties in southern New Mexico.



For more information on this District and to learn more about the Federal Reserve Bank of Dallas's operations, visit https://www.dallasfed.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/dallasfinstmt2020.pdf.

Class A

Christopher C. Doyle, 2020
President and Chief Executive Officer, Texas First Bank, Texas City, TX

Kelly A. Barclay, 2021
President and Chief Executive Officer, Ozona National Bank, Wimberly, TX

Joe Quiroga, 2022
President, Texas National Bank, Edinburg, TX

Class B

Gerald B. Smith, 2020
Chairman and Chief Executive Officer, Smith, Graham & Company Investment Advisors, L.P., Houston, TX

Renard U. Johnson, 2021
President and Chief Executive Officer, Management & Engineering Technologies International, Inc., El Paso, TX

Cynthia Taylor, 2022
President and Chief Executive Officer, Oil States International Inc., Houston, TX

Class C

Claudia Aguirre, 2020
President and Chief Executive Officer, BakerRipley, Houston, TX

Greg L. Armstrong, 2021
Retired Chairman and Chief Executive Officer, Plains All American Pipeline L.P., Houston, TX

Thomas J. Falk, 2022
Retired Chairman and Chief Executive Officer, Kimberly-Clark Corporation, Dallas, TX

El Paso Branch

Appointed by the Federal Reserve Bank

Sally A. Hurt-Deitch, 2020
Group CEO Mid-South, Memphis Market CEO, and St. Francis Hospital CEO, Tenet Healthcare, El Paso, TX

Teresa O. Molina, 2020
President, First New Mexico Bank, Deming, NM

William Serrata, 2021
President, El Paso Community College, El Paso, TX

Von C. Washington, Sr., 2022
President, IDA Technology, El Paso, TX

Appointed by the Board of Governors

Richard D. Folger, 2020
Managing General Partner, Colbridge Partners Ltd., Midland, TX

Tracy J. Yellen, 2021
Chief Executive Officer, Paso del Norte Community Foundation and Paso Del Norte Health Foundation, El Paso, TX

Julio Chiu, 2022
Founder and Chief Executive Officer, Seisa Group, El Paso, TX

Houston Branch

Appointed by the Federal Reserve Bank

Albert Chao, 2020
President and Chief Executive Officer, Westlake Chemical Corporation and Westlake Chemical Partners GP LLC, Houston, TX

Gina Luna, 2020
Chief Executive Officer, Luna Strategies, LLC, Houston, TX

David Zalman, 2021
Chairman and Chief Executive Officer, Prosperity Bancshares, Houston, TX

Gary R. Petersen, 2022
Managing Partner and Founder, EnCap Investments L.P., Houston, TX

Appointed by the Board of Governors

Ruth J. Simmons, 2020
President, Prairie View A&M University, Prairie View, TX

Janiece Longoria, 2021
Vice Chairman, UT Board of Regents, and Former Chairman, Port of Houston Authority, Houston, TX

Darryl L. Wilson, 2022
President and Founder, The Wilson Collective, Houston, TX

San Antonio Branch

Appointed by the Federal Reserve Bank

Robert L. Lozano, 2020
President, F&P Brands, Pharr, TX

Tyson Tuttle, 2020
President and Chief Executive Officer, Silicon Labs, Austin, TX

Alfred B. Jones, 2021
Director, American Bank Holding Corp., Corpus Christi, TX

Charles E. Amato, 2022
Chairman and Co-Founder, Southwest Business Corp., San Antonio, TX

Appointed by the Board of Governors

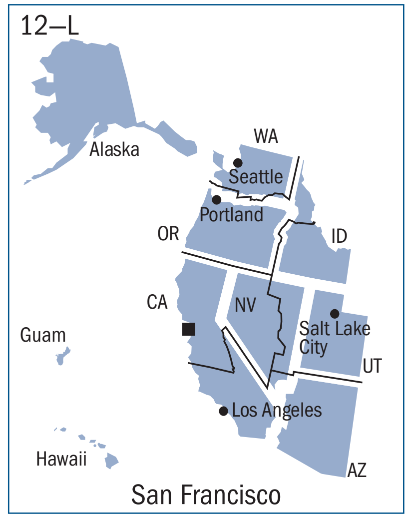
Paula Gold-Williams, 2020
President and Chief Executive Officer, CPS Energy, San Antonio, TX

Jesús Garza, 2021
Retired President and Chief Executive Officer, Seton Healthcare Family, Austin, TX

Denise M. Trauth, 2022
President, Texas State University, San Marcos, TX

District 12–San Francisco

Covers the states of Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Utah, and Washington, and serves American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.



For more information on this District and to learn more about the Federal Reserve Bank of San Francisco's operations, visit http://www.frbsf.org/. Information on economic conditions for this District can be found in the Federal Reserve System's Beige Book at https://www.federalreserve.gov/monetarypolicy/beigebook2020.htm. Also find the Reserve Bank's financial statements for 2020 at https://www.federalreserve.gov/aboutthefed/files/sanfranciscofinstmt2020.pdf.

Class A

S. Randolph Compton, 2020
Chief Executive Officer and Co-Chair of the Board, Pioneer Trust Bank, N.A., Salem, OR

Greg Becker, 2021
President and Chief Executive Officer, SVB Financial Group, Chief Executive Officer, Silicon Valley Bank, Santa Clara, CA

Richard M. Sanborn, 2022
Retired President and Chief Executive Officer, Seacoast Commerce Bank, San Diego, CA

Class B

Tamara L. Lundgren, 2020
Chairman, President, and Chief Executive Officer, Schnitzer Steel Industries, Inc., Portland, OR

Arthur F. Oppenheimer, 2021
Chairman and Chief Executive Officer, Oppenheimer Companies, Inc., President, Oppenheimer Development Corporation, Boise, ID

Sanford L. Michelman, 2022
Chairman, Michelman & Robinson, LLP, Los Angeles, CA

Class C

Rosemary Turner, 2020
Retired President, North California District, United Parcel Service, Inc., Oakland, CA

David P. White, 2021
National Executive Director, SAG-AFTRA, Los Angeles, CA

Barry M. Meyer, 2022
Retired Chairman and Chief Executive Officer, Warner Bros., Founder and Chairman, North Ten Mile Associates, Los Angeles, CA

Los Angeles Branch

Appointed by the Federal Reserve Bank

Carl J.P. Chang, 2020
Chief Executive Officer, Redwood-Kairos Real Estate Partners and Pieology Pizzeria, Rancho Santa Margarita, CA

Maritza Diaz, 2021
Chief Executive Officer, iTjuana, San Marcos, CA

Luis Faura, 2021
President and Chief Executive Officer, C&F Foods, Inc., City of Industry, CA

Steven W. Streit, 2022
Chief Innovation Officer, Green Dot Bank and Green Dot Corporation, Pasadena, CA

Appointed by the Board of Governors

Robert H. Gleason, 2020
President and Chief Executive Officer, Evans Hotels, San Diego, CA

Anita V. Pramoda, 2021
Chief Executive Officer, Owned Outcomes, Las Vegas, NV

Vacancy, 2022

Portland Branch

Appointed by the Federal Reserve Bank

Hilary K. Krane, 2020
Executive Vice President, Chief Administrative Officer, and General Counsel, Nike, Inc., Beaverton, OR

Cheryl R. Nester Wolfe, 2020
President and Chief Executive Officer, Salem Health Hospital and Clinics, Salem, OR

Stacey M.L. Dodson, 2021
Market President, Portland and Southwest Washington, U.S. Bank, Portland, OR

Maria Pope, 2022
President and Chief Executive Officer, Portland General Electric Company, Portland, OR

Appointed by the Board of Governors

Charles A. Wilhoite, 2020
Managing Director, Willamette Management Associates, Portland, OR

Gale Castillo, 2021
President, Cascade Centers, Inc., Portland, OR

Anne C. Kubisch, 2022
President and Chief Executive Officer, The Ford Family Foundation, Roseburg, OR

Salt Lake City Branch

Appointed by the Federal Reserve Bank

Jas Krdzalic, 2020
President and Chief Executive Officer, Bodybuilding.com, Boise, ID

Park Price, 2020
Chief Executive Officer Emeritus and Chairman, Bank of Idaho, Idaho Falls, ID

O. Randall Woodbury, 2021
President and Chief Executive Officer, Woodbury Corporation, Salt Lake City, UT

Deneece Huftalin, 2022
President, Salt Lake Community College, Tayorsville, UT

Appointed by the Board of Governors

Patricia R. Richards, 2020
Retired President and Chief Executive Officer, SelectHealth, Inc., Murray, UT

Thomas K. Corrick, 2021
Chief Executive Officer, Boise Cascade Company, Boise, ID

Russell A. Childs, 2022
Chief Executive Officer and President, SkyWest, Inc., St. George, UT

Seattle Branch

Appointed by the Federal Reserve Bank

Carol Gore, 2020
President and Chief Executive Officer, Cook Inlet Housing Authority, Anchorage, AK

Laura Lee Stewart, 2020
President and Chief Executive Officer, Sound Community Bank and Sound Financial Bancorporation, Seattle, WA

Cheryl B. Fambles, 2021
Chief Executive Officer, Pacific Mountain Workforce Development Council, Tumwater, WA

Robert C. Donegan, 2022
President, Ivar’s Inc., Seattle, WA

Appointed by the Board of Governors

Elaine S. Couture, 2020
Executive Vice President and Chief Executive Officer, Washington and Montana Region, Providence St. Joseph Health, Spokane, WA

West Mathison, 2021
President, Stemilt Growers, LLC, Wenatchee, WA

Craig Dawson, 2022
President and Chief Executive Officer, Retail Lockbox, Inc., Seattle, WA

Reserve Bank and Branch Leadership

Each year, the Board of Governors designates one Class C director to serve as chair, and one Class C director to serve as deputy chair, of each Reserve Bank board. Reserve Banks also have a president and first vice president who are appointed by the Bank's Class C, and certain Class B, directors, subject to approval by the Board of Governors. Each Reserve Bank selects a chair for every Branch in its District from among the directors on the Branch board who were appointed by the Board of Governors. For each Branch, an officer from its Reserve Bank is also charged with the oversight of Branch operations.

Boston

Phillip L. Clay, Chair

Christina Hull Paxson, Deputy Chair

Eric S. Rosengren, President and Chief Executive Officer

Kenneth C. Montgomery, First Vice President and Chief Operating Officer

New York

Denise Scott, Chair

Rosa Gil, Deputy Chair

John C. Williams, President and Chief Executive Officer

Helen Mucciolo, Acting First Vice President

Additional office at East Rutherford, NJ

Philadelphia

Madeline Bell, Chair

Anthony Ibarguen, Deputy Chair

Patrick T. Harker, President and Chief Executive Officer

James D. Narron, First Vice President and Chief Operating Officer

Cleveland

Dawne S. Hickton, Chair

Dwight E. Smith, Deputy Chair

Loretta J. Mester, President and Chief Executive Officer

Gregory L. Stefani, First Vice President and Chief Operating Officer

Cincinnati

Jenell R. Ross, Chair

Rick Kaglic, Vice President and Senior Regional Officer

Pittsburgh

Dmitri D. Shiry, Chair

Mekael Teshome, Vice President and Senior Regional Officer

Richmond

Kathy J. Warden, Chair

Eugene A. Woods, Deputy Chair

Thomas I. Barkin, President and Chief Executive Officer

Becky Bareford, First Vice President and Chief Operating Officer

Baltimore

Susan J. Ganz, Chair

Andy Bauer, Vice President and Baltimore Regional Executive

Charlotte

R. Glenn Sherrill, Jr, Chair

Matthew A. Martin, Senior Vice President and Charlotte Regional Executive

Atlanta

Myron A. Gray, Chair

Elizabeth A. Smith, Deputy Chair

Raphael W. Bostic, President and Chief Executive Officer

André Anderson, First Vice President and Chief Operating Officer

Birmingham

Merrill H. Stewart, Jr., Chair

Anoop Mishra, Vice President and Regional Executive

Jacksonville

Troy D. Taylor, Chair

Christopher L. Oakley, Vice President and Regional Executive

Miami

Keith T. Koenig, Chair

Karen Gilmore, Vice President and Regional Executive

Nashville

Thomas Zacharia, Chair

Laurel Graefe, Vice President and Regional Executive

New Orleans

Michael E. Hicks, Jr., Chair

Adrienne C. Slack, Vice President and Regional Executive

Chicago

E. Scott Santi, Chair

Wright L. Lassiter, III, Deputy Chair

Charles L. Evans, President and Chief Executive Officer

Ellen Bromagen, First Vice President and Chief Operating Officer

Additional office at Des Moines, IA

Detroit

Joseph B. Anderson, Jr, Chair

Rick Mattoon, Vice President and Regional Executive

St. Louis

Suzanne Sitherwood, Chair

James M. McKelvey, Jr., Deputy Chair

James B. Bullard, President and Chief Executive Officer

Kathy O. Paese, First Vice President and Chief Operating Officer

Little Rock

Vickie D. Judy, Chair

Robert Hopkins, Senior Vice President and Regional Executive

Louisville

Emerson M. Goodwin, Chair

Nikki R. Lanier, Senior Vice President and Regional Executive

Memphis

David T. Cochran, Jr., Chair

Douglas G. Scarboro, Senior Vice President and Regional Executive

Minneapolis

Srilata Zaheer, Chair

Harry D. Melander, Deputy Chair

Neel Kashkari, President and Chief Executive Officer

Ron Feldman, First Vice President

Helena

Norma Nickerson, Chair

Kansas City

James C. Farrell, Chair

Edmond Johnson, Deputy Chair

Esther L. George, President and Chief Executive Officer

Kelly J. Dubbert, First Vice President and Chief Operating Officer

Denver

Taryn Christison, Chair

Nicholas Sly, Assistant Vice President and Branch Executive

Oklahoma City

Tina Patel, Chair

Chad R. Wilkerson, Vice President and Branch Executive

Omaha

Kimberly A. Russel, Chair

Nathan Kauffman, Assistant Vice President and Branch Executive

Dallas

Greg L. Armstrong, Chair

Thomas J. Falk, Deputy Chair

Robert S. Kaplan, President and Chief Executive Officer

Meredith N. Black, First Vice President and Chief Operating Officer

El Paso

Richard D. Folger, Chair

Roberto A. Coronado, Senior Vice President in Charge

Houston

Darryl L. Wilson, Chair

Daron D. Peschel, Senior Vice President in Charge

San Antonio

Jesús Garza, Chair

Blake Hastings, Senior Vice President in Charge

San Francisco

Barry M. Meyer, Chair

Rosemary Turner, Deputy Chair

Mary C. Daly, President and Chief Executive Officer

Mark A. Gould, First Vice President and Chief Operating Officer

Additional office at Phoenix, AZ

Los Angeles

Anita V. Pramoda, Chair

Roger W. Replogle, Executive Vice President and Regional Executive

Portland

Charles A. Wilhoite, Chair

Lynn Jorgensen, Vice President and Regional Executive

Salt Lake City

Russell A. Childs, Chair

Becky Potts, Vice President and Regional Executive

Seattle

Craig Dawson, Chair

Darlene Wilczynski, Vice President and Regional Executive

Leadership Conferences

Conference of Chairs

The chairs of the Federal Reserve Banks are organized into the Conference of Chairs, which meets to consider matters of common interest and to consult with and advise the Board of Governors. Such meetings, also attended by the deputy chairs, were held in Washington, D.C., on May 6, 2020, October 6 and 9, 2020, and November 10, 2020. The conference's executive committee members for 2020 are listed below.[6]

Conference of Chairs Executive Committee—2020

Dawne S. Hickton, Chair, Federal Reserve Bank of Cleveland

Phillip L. Clay, Vice Chair, Federal Reserve Bank of Boston

Greg L. Armstrong, Member, Federal Reserve Bank of Dallas

Conference of Presidents

The presidents of the Federal Reserve Banks are organized into the Conference of Presidents, which meets periodically to identify, define, and deliberate issues of strategic significance to the Federal Reserve System; to consider matters of common interest; and to consult with and advise the Board of Governors. The chief executive officer of each Reserve Bank was originally labeled governor and did not receive the title of president until the passage of the Banking Act of 1935. Consequently, when the Conference was first established in 1914 it was known as the Conference of Governors. Conference officers for 2020 are listed below.

Conference of Presidents—2020

Charles L. Evans, Chair, Federal Reserve Bank of Chicago

James B. Bullard, Vice Chair, Federal Reserve Bank of St. Louis

Keri Trolson, Secretary, Federal Reserve Bank of Chicago

Douglas Scarboro, Assistant Secretary, Federal Reserve Bank of St. Louis

[6] On November 10, 2020, the Conference of Chairs elected Greg L. Armstrong, chair of the Federal Reserve Bank of Dallas, as chair of the conference's executive committee for 2021. The conference also elected Elizabeth Smith, deputy chair of the Federal Reserve Bank of Atlanta, as vice chair, and Eugene A. Woods, deputy chair of the Federal Reserve Bank of Richmond, as the executive committee's third member.

Conference of First Vice Presidents

The Conference of First Vice Presidents of the Federal Reserve Banks was organized in 1969 to meet periodically for the consideration of operations and other matters. Conference officers for 2020 are listed below.[7]

Conference of First Vice Presidents—2020

Kelly J. Dubbert, Chair,
Federal Reserve Bank of Kansas City

Michael Strine, Vice Chair,
Federal Reserve Bank of New York

Laura Forman, Secretary,
Federal Reserve Bank of New York

Joshua Silverstein, Assistant Secretary, Federal Reserve Bank of Philadelphia

[7] On December 8, 2020, the conference elected James Narron, Federal Reserve Bank of Philadelphia, as chair for 2021 and Ron Feldman, Federal Reserve Bank of Minneapolis, as vice chair. The conference also elected Josh Silverstein, Federal Reserve Bank of Philadelphia, as secretary and Jamica Quilin, Federal Reserve Bank of Minneapolis, as assistant secretary.

B | Minutes of Federal Open Market Committee Meetings

The policy actions of the Federal Open Market Committee, recorded in the minutes of its meetings, are available in the Annual Report of the Board of Governors pursuant to the requirements of section 10 of the Federal Reserve Act. That section provides that the Board shall keep a complete record of the actions taken by the Board and by the Federal Open Market Committee on all questions of policy relating to open market operations, that it shall record therein the votes taken in connection with the determination of open market policies and the reasons underlying each policy action, and that it shall include in its annual report to Congress a full account of such actions. Links to the minutes for each of the eight regularly scheduled meetings held in 2020 are in the list below.

Meeting Minutes

- Meeting held on January 28–29, 2020
  https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20200129.pdf
- Meeting held on March 15, 2020
  https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20200315.pdf
- Meeting held on April 28–29, 2020
  https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20200429.pdf
- Meeting held on June 9–10, 2020
  https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20200610.pdf
- Meeting held on July 28–29, 2020
  https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20200729.pdf
- Meeting held on September 15–16, 2020
  https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20200916.pdf
- Meeting held on November 4–5, 2020
  https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20201105.pdf
- Meeting held on December 15–16, 2020
  https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20201216.pdf

The minutes of the meetings contain the votes on the policy decisions made at those meetings, as well as a summary of the information and discussions that led to the decisions. In addition, a Summary of Economic Projections (SEP) was published as an addendum to the minutes of the

June and September 2020 meetings.[1] The descriptions of economic and financial conditions in the minutes and the SEP are based solely on the information that was available to the Committee at the time of the meetings.

Members of the Committee voting for a particular action may differ among themselves as to the reasons for their votes; in such cases, the range of their views is noted in the minutes. When members dissent from a decision, they are identified in the minutes and a summary of the reasons for their dissent is provided.

Policy directives of the Federal Open Market Committee are issued to the Federal Reserve Bank of New York as the Bank selected by the Committee to execute transactions for the System Open Market Account. In the area of domestic open market operations, the Federal Reserve Bank of New York operates under instructions from the Federal Open Market Committee that take the form of an Authorization for Domestic Open Market Operations and a Domestic Policy Directive. (A new Domestic Policy Directive is adopted at each regularly scheduled meeting.) In the foreign currency area, the Federal Reserve Bank of New York operates under an Authorization for Foreign Currency Operations and a Foreign Currency Directive. Changes in the instruments during the year are reported in the minutes for the individual meetings.[2]

For more information about the Federal Open Market Committee's meetings, statements, and minutes, visit the Board's website at https://www.federalreserve.gov/monetarypolicy/fomccalendars.htm.

[1] No projections were submitted in conjunction with the March 2020 meeting. The December 2020 meeting was the first meeting for which all the SEP exhibits were published at 2 p.m. on the second day of the meeting, instead of being included as part of an addendum to the minutes. The written portion of the SEP that described the exhibits, which had also previously been part of the addendum to the meeting minutes, was discontinued.

[2] As of January 1, 2020, the Federal Reserve Bank of New York was operating under the Domestic Policy Directive approved at the December 10–11, 2019, Committee meeting. The other policy instruments (the Authorization for Domestic Open Market Operations, the Authorization for Foreign Currency Operations, and the Foreign Currency Directive) in effect as of January 1, 2020, were approved at the January 29–30, 2019, meeting.

C | Federal Reserve System Audits

The Board of Governors, the Federal Reserve Banks, and the Federal Reserve System as a whole are all subject to several levels of audit and review.

The Board's financial statements and internal controls over financial reporting are audited annually by an independent outside auditor retained by the Board's Office of Inspector General (OIG). The outside auditor also tests the Board's compliance with certain provisions of laws, regulations, and contracts affecting those statements.

The Reserve Banks' financial statements are audited annually by an independent outside auditor retained by the Board of Governors. In addition, the Reserve Banks are subject to annual examination by the Board. As discussed in section 5, "Payment System and Reserve Bank Oversight," the Board's examination includes a wide range of ongoing oversight activities conducted on site and off site by staff of the Board's Division of Reserve Bank Operations and Payment Systems.

The audited annual financial statements of the Board of Governors, the Reserve Banks, and the Federal Reserve System as a whole are available on the Board's website at https://www.federalreserve.gov/aboutthefed/audited-annual-financial-statements.htm.

In addition, the OIG conducts audits, evaluations, investigations, and other reviews relating to the Board's programs and operations as well as to Board functions delegated to the Reserve Banks. Certain aspects of Federal Reserve operations are also subject to review by the Government Accountability Office.

Office of Inspector General Activities

The OIG for the Federal Reserve Board, which is also the OIG for the Consumer Financial Protection Bureau (CFPB), operates in accordance with the Inspector General Act of 1978, as amended. The OIG plans and conducts audits, inspections, evaluations, investigations, and other reviews relating to Board and CFPB programs and operations, including functions that the Board has delegated to the Federal Reserve Banks. It also retains an independent public accounting firm to annually audit the Board's and the Federal Financial Institutions Examination Council's financial statements. These activities promote economy and efficiency; enhance policies and procedures; and prevent and detect waste, fraud, and abuse. In addition, the OIG keeps the Congress, the Board of Governors, and the CFPB director fully informed about serious abuses and deficiencies.

Most recently, the OIG has focused significant resources on oversight of the Board's pandemic response efforts. Specifically, the OIG has identified a new management challenge that has arisen due to the creation of the Board's new emergency lending programs and facilities and updated three previously identified challenges to account for new aspects presented by the pandemic. The OIG also initiated an audit and a monitoring effort, with other audits planned, in key risk areas and opened investigations of alleged fraud related to these programs.

During 2020, the OIG issued 14 reports (table C.1). In addition, the OIG issued to the Board and to the CFPB 18 memorandums on information technology and management and operations issues. Because of the sensitive nature of some of the material, 14 of these memorandums are nonpublic. The OIG also conducted follow-up reviews to evaluate actions taken on recommendations for corrective action. Regarding the OIG's investigative work related to the Board and the CFPB, 70 investigations were opened and 14 investigations were closed during the year. OIG investigative work resulted in 21 arrests, 12 criminal complaints, 15 criminal informations, 15 indictments, 13 convictions, and 4 prohibitions from the banking industry, as well as $7,767,550 in criminal fines and restitution and $3,011,250,000 in civil judgments. The OIG also issued a review on the CFPB's budget and funding processes and two semiannual reports to Congress. The

Table C.1. OIG reports issued in 2020

Report title	Month issued
Federal Financial Institutions Examination Council Financial Statements as of and for the Years Ended December 31, 2019 and 2018, and Independent Auditors' Reports	February
The Bureau's Office of Enforcement Has Centralized and Improved Its Final Order Follow-Up Activities, but Additional Resources and Guidance Are Needed	March
The Board Should Finalize Guidance to Clearly Define Those Considered Senior Examiners and Subject to the Associated Postemployment Restriction	March
Board of Governors of the Federal Reserve System Financial Statements as of and for the Years Ended December 31, 2019 and 2018, and Independent Auditors' Reports	March
The Board's Oversight of Its Designated Financial Market Utility Supervision Program Is Generally Effective, but Certain Program Aspects Can Be Improved	March
The Board Can Enhance Certain Aspects of Its Enforcement Action Monitoring Practices	March
The Board Can Strengthen Its Oversight of the Protective Services Unit and Improve Controls for Certain Protective Services Unit Processes	March
The Board Can Further Enhance the Design and Implementation of Its Operating Budget Process	March
The Board Can Improve Its Contract Administration Processes	March
Independent Accountants' Report on the Bureau Civil Penalty Fund's 2019 Compliance With the Improper Payments Information Act of 2002, as Amended	April
The Bureau Can Improve Its Periodic Monitoring Program to Better Target Risk and Enhance Training for Examiners	June
The Board's Approach to the Cybersecurity Supervision of LISCC Firms Continues to Evolve and Can Be Enhanced	September
2020 Audit of the Board's Information Security Program	November
2020 Audit of the Bureau's Information Security Program	November

OIG performed approximately 37 reviews of legislation and regulations related to the operations of the Board, the CFPB, or the OIG.

For more information and to view the OIG's publications, visit the OIG's website at https://oig.federalreserve.gov. Specific details about the OIG's body of work also may be found in the OIG's *Work Plan* and semiannual reports to Congress.

Government Accountability Office Reviews

The Federal Banking Agency Audit Act (Pub. L. No. 95–320) authorizes the Government Accountability Office (GAO) to audit certain aspects of Federal Reserve System operations. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, as well as the Coronavirus Aid, Relief, and Economic Security Act of 2020, directs the GAO to conduct additional audits with respect to these operations. In 2020, the GAO completed 16 projects that involved the Federal Reserve (table C.2). Twenty-one projects were ongoing as of December 31, 2020 (table C.3).

For more information and to view GAO reports, visit the GAO's website at https://www.gao.gov.

Table C.2. GAO reports issued in 2020

Report title	Report number	Month issued
Counternarcotics: Treasury Reports Some Results from Designating Drug Kingpins, but Should Improve Information on Agencies' Expenditures	GAO-20-112	January
Countering Illicit Finance and Trade: U.S. Efforts to Combat Trade-Based Money Laundering	GAO-20-314R	January
Economic Sanctions: Treasury and State Have Received Increased Resources for Sanctions Implementation but Face Hiring Challenges	GAO-20-324	March
Trade-Based Money Laundering: U.S. Government Has Worked with Partners to Combat the Threat, but Could Strengthen Its Efforts	GAO-20-333	May
COVID-19: Opportunities to Improve Federal Response and Recovery Efforts	GAO-20-625	June
Financial Company Bankruptcies: Congress and Regulators Have Updated Resolution Planning Requirements	GAO-20-608R	July
Retirement Security: DOL Could Better Inform Divorcing Parties About Dividing Savings	GAO-20-541	August
COVID-19: Brief Update on Initial Federal Response to the Pandemic	GAO-20-708	August
Critical Infrastructure Protection: Treasury Needs to Improve Tracking of Financial Sector Cybersecurity Risk Mitigation Efforts	GAO-20-631	September
COVID-19: Federal Efforts Could Be Strengthened by Timely and Concerted Actions	GAO-20-701	September
Anti-Money Laundering: Opportunities Exist to Increase Law Enforcement Use of Bank Secrecy Act Reports, and Banks' Costs to Comply with the Act Varied	GAO-20-574	September
Financial Audit: Bureau of the Fiscal Service's FY 2020 and FY 2019 Schedules of Federal Debt	GAO-21-124	November
Consumer Privacy: Better Disclosures Needed on Information Sharing by Banks and Credit Unions	GAO-21-36	November
COVID-19: Urgent Actions Needed to Better Ensure an Effective Federal Response	GAO-21-191	November

(continued)

Table C.2. GAO reports issued in 2020—*continued*

Report title	Report number	Month issued
Federal Reserve Lending Programs: Use of CARES Act-Supported Programs Has Been Limited and Flow of Credit Has Generally Improved	GAO-21-180	December
Financial Stability: Agencies Have Not Found Leveraged Lending to Significantly Threaten Stability but Remain Cautious Amid Pandemic	GAO-21-167	December

Table C.3. Projects active at year-end 2020

Subject of project	Month initiated	Status
Macroprudential regulation	August 2019	Closed 1/28/2021
Compliance with the National Flood Insurance Program mandatory purchase requirement	September 2019	Open
Debt held by older Americans	September 2019	Open
U.S. efforts to combat trade-based money laundering (continued)	January 2020	Open
HMDA exemptions	June 2020	Open
Women in financial services	June 2020	Open
CFPB's enforcement of fair lending	July 2020	Open
Alternative data in mortgage lending	July 2020	Open
FinCEN's Customer Due Diligence Rule	August 2020	Terminated 1/29/2021
The housing finance system in the pandemic	August 2020	Open
CARES Act provisions to assist mortgage borrowers and renters	September 2020	Federal Reserve removed as agency participant 3/31/2021
Welfare of federal working dogs	September 2020	Open
Access to banking services	October 2020	Open
Treasury's debt management response to the COVID-19 pandemic	October 2020	Open
HMDA loan volume thresholds	October 2020	Open
FIRREA title XI appraisal requirement exemptions	October 2020	Open
Financial regulator privacy practices	October 2020	Open
Monitoring and oversight of response to COVID-19 pandemic (January 2021 report)	October 2020	Closed 1/28/2021
Monitoring and oversight of response to COVID-19 pandemic (March 2021 report)	October 2020	Closed 3/31/2021
CARES Act report on loans, guarantees, and other investments (2021 report)	December 2020	Open
Native American Direct Loan program	December 2020	Open

D | Federal Reserve System Budgets

The Federal Reserve Board of Governors and the Federal Reserve Banks prepare annual budgets as part of their efforts to ensure appropriate stewardship and accountability.[1] This section presents information on the 2020 budget performance of the Board and Reserve Banks and on their 2021 budgets, budgeting processes, and trends in expenses and employment. This section also presents information on the costs of new currency.

System Budgets Overview

Tables D.1 and D.2 summarize the Federal Reserve Board of Governors' and Federal Reserve Banks' 2020 budgeted, 2020 actual, and 2021 budgeted operating expenses and employment.[2]

2020 Budget Performance

In carrying out its responsibilities in 2020, the Federal Reserve System incurred $5,255.4 million in net expenses. Total System operating expenses of $6,437.1 million were offset by $1,181.7 million in revenue from priced services, claims for reimbursement, and other income. Total 2020 System operating expenses were $67.1 million, or 1.3 percent, less than the amount budgeted for 2020.

2021 Operating Expense Budget

Budgeted 2021 System operating expenses of $5,877.9 million, net of revenue and reimbursements, are $622.5 million, or 11.8 percent, higher than 2020 actual expenses. The Reserve Bank budgets comprise almost three-quarters of the System budget (figure D.1). Budgeted 2021 revenue from priced services is 1.8 percent lower than 2020 actual revenue, primarily reflecting a continual decline in check volume, which recently has been hastened by the COVID-19 pandemic.[3]

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[1] Before 2013, information about the budgeted expenses of the Board and Reserve Banks was presented in a separate report titled *Annual Report: Budget Review*. Copies of that report are available at https://www.federalreserve.gov/publications/budget-review/default.htm.

Each budget covers one calendar year.

[2] Substantially all employees of the Board and Reserve Banks participate in the Retirement Plan for Employees of the Federal Reserve System (System Plan). Reserve Bank employees at certain compensation levels participate in the Benefit Equalization Plan, and certain Reserve Bank officers participate in the Supplemental Retirement Plan for Select Officers of the Reserve Banks. The operating expenses of the Reserve Banks presented in this section do not include expenses related to the retirement plans; however, the 2020 claims for reimbursement include the allocated portion of the pension. Additional information about these expenses can be found in appendix G, "Statistical Tables."

Board employees also participate in the Benefit Equalization Plan, and Board officers participate in the Pension Enhancement Plan for Officers of the Board of Governors of the Federal Reserve System (PEP). The operating expenses of the Board presented in this section include expenses related to Board participants in the Benefit Equalization Plan and PEP but do not include expenses related to the System Plan.

[3] The COVID-19 pandemic emerged as a profound health emergency in early 2020 that disrupted the national and global economy and necessitated widespread social distancing measures, such as full-time telework for many workers within the United States, including most Federal Reserve System employees.

Table D.1. Total operating expenses of the Federal Reserve System, net of receipts and claims for reimbursement, 2020–21

Millions of dollars, except as noted

Item	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Board	814.4	811.0	-3.4	-0.4	869.5	58.5	7.2
Office of Inspector General	28.9	32.0	3.1	10.8	35.1	3.1	9.7
Reserve Banks[1]	4,771.2	4,763.0	-8.2	-0.2	5,029.8	266.8	5.6
Currency	877.2	831.1	-46.1	-5.3	1,095.8	264.8	31.9
Total System operating expenses[2]	6,491.7	6,437.1	-54.6	-0.8	7,030.2	593.1	9.2
Revenue from priced services	443.8	446.9	3.1	0.7	439.1	-7.8	-1.8
Claims for reimbursement[3]	722.5	731.9	9.3	1.3	710.4	-21.5	-2.9
Other income[4]	2.8	2.9	0.1	4.7	2.8	-0.1	-3.8
Revenue and claims for reimbursement[5]	1,169.2	1,181.7	12.6	1.1	1,152.3	-29.4	-2.5
Total System operating expenses, net of revenue and claims for reimbursement	**5,322.5**	**5,255.4**	**-67.1**	**-1.3**	**5,877.9**	**622.5**	**11.8**

Note: Here and in subsequent tables, components may not sum to totals and may not yield percentages shown because of rounding.

1 Excludes Reserve Bank assessments by the Board of Governors for costs related to currency and the operations of the Board of Governors, Office of Inspector General, and the Consumer Financial Protection Bureau.

2 Includes total operating expenses of the Federal Reserve Information Technology support function and the System's Office of Employee Benefits, the majority of which are in the Reserve Banks.

3 Reimbursable claims include the expenses of fiscal agency. In 2020 actual, the fiscal agency allocated portion of the pension is also included but is not included for the budget. The fiscal agency budgeted pension expense is $48.0 million in 2020 and $68.3 million in 2021.

4 Fees that depository institutions pay for the settlement component of the Fedwire Securities Service transactions for Treasury securities transfers.

5 Excludes annual assessments for the supervision of large financial companies pursuant to Regulation TT, which are not recognized as revenue or used to fund Board expenses. (See section 4, "Supervision and Regulation," for more information.)

Table D.2. Employment in the Federal Reserve System, 2020–21

Item	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Board	2,903	2,896	-7	-0.2	2,971	76	2.6
Office of Inspector General	131	127	-5	-3.7	136	10	7.6
Reserve Banks[1]	19,898	20,128	230	1.2	20,652	524	2.6
Currency	15	14	0	-2.6	19	4	31.6
Total System employment	**22,947**	**23,165**	**218**	**0.9**	**23,778**	**613**	**2.6**

Note: Employment numbers are average number of personnel (ANP). ANP is the average number of employees expressed in terms of full-time positions for the period and includes outside agency help. In prior Annual Reports, the Board reported authorized position counts.

1 Includes employment of the Federal Reserve Information Technology support function and the Office of Employee Benefits.

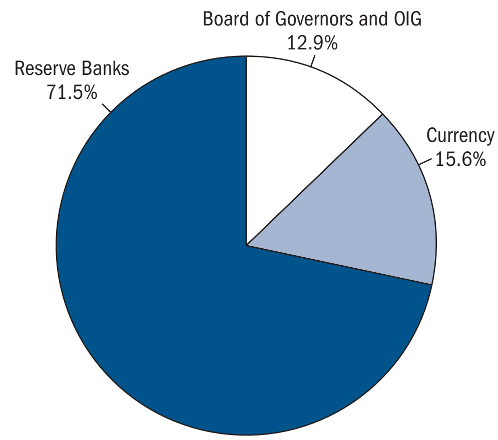
Trends in Expenses and Employment

From the actual 2011 amount to the budgeted 2021 amount, the total operating expenses of the Federal Reserve System have increased an average of 4.9 percent annually (figure D.2). This rate is up 0.6 percent from the 10-year growth rate between 2010 and 2020, reflecting technology investments. The total rate of growth in Federal Reserve System expenses reflects the staffing increases in information technology (IT) to support large application development projects, information security efforts, end-user services, and the central computing environment. Supervision resource levels were augmented to meet requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) and to support portfolio growth (figure D.3).

Growth in supervision expenses over the past 10 years has been driven by implementation of expanded responsibilities mandated by the Dodd-Frank Act, changes in the state member bank portfolio, building out the cybersecurity supervision program, and supporting other strategic national initiatives. However, supervision growth has moderated because of the Economic Growth, Regulatory Reform and Consumer Protection Act, and as supervisory conditions improved, efficiencies were found and resources were shifted toward higher-risk activities and emerging risks. In particular, resources were temporarily shifted from supervision to support the credit and liquidity facilities responding to the COVID-19 pandemic in 2020.

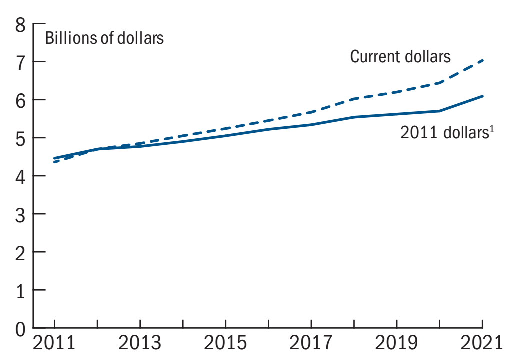
Expense growth in the monetary policy area during the financial crisis has been followed more recently by increased investment in financial stability monitoring, operational activities, and the dedication of additional resources to regional economic research.

Figure D.1. Distribution of budgeted expenses of the Federal Reserve System, 2021



OIG: Office of Inspector General.

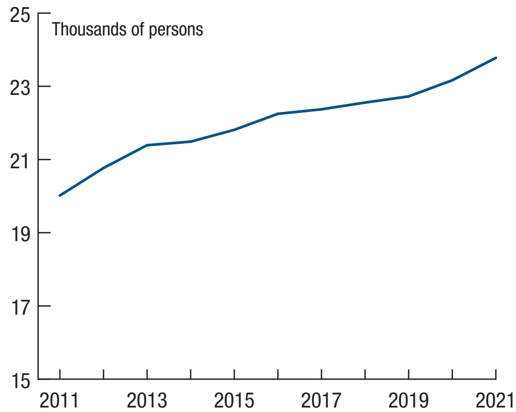
Figure D.2. Total expenses of the Federal Reserve System, 2011–21



Note: For 2021, budgeted. Includes expenses of the OIG.

1. Calculated with the GDP price deflator.

Figure D.3. Employment in the Federal Reserve System, 2011–21



Note: For 2021, budgeted. From 2011 to 2018, employment numbers presented include position counts for the Board and the OIG and average number of personnel (ANP) for the Reserve Banks. For 2019 through 2021, employment numbers for all entities are represented in ANP.

Growth in fee-based services are primarily for investments in the payment infrastructure modernization efforts, including the FedNow^{SM} Service initiative, and investments associated with multiyear technology initiatives to modernize processing platforms for Fedwire and automated clearinghouse (ACH).[4]

Expenses for services to financial institutions continue to increase as a result of the next-generation currency-processing program (NextGen).[5] More recently, increased demand for cash and social distancing protocols related to the COVID-19 pandemic have resulted in higher cash operations personnel costs and other related expenses for essential on-site staff, such as hazard pay, rapid COVID-19 testing, and frequent and in-depth cleaning services. Growth in services to financial institutions and the public is also attributable to the addition of resources in support of the credit and liquidity facilities created in response to the COVID-19 pandemic.

Treasury services expenses have increased to meet expanding scope and evolving needs, including business and technology modernization of payment services, financing and securities services, and accounting and reporting services, as well as significant investment in infrastructure and technology services.

2021 Capital Budgets

The capital budgets for the Board and Reserve Banks total $180.8 million and $598.9 million, respectively.[6] As in previous years, the 2021 capital budgets include funding for projects that support the strategic direction outlined by the Board, System leadership, and each Reserve Bank.

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4 The Federal Reserve is developing a new round-the-clock, real-time payment and settlement service, called the FedNow Service, to support faster payments in the United States. The initiative to modernize the ACH processing platform was completed in early 2021.

5 The Cash Product Office is implementing a strategy to transition the current fleet of high-speed currency processing machines and the associated sensor suite from the Banknote Processing System platform to the future next-generation (NextGen) processing technologies (machines and sensor technologies).

6 The capital budget reported for the Board includes single-year capital expenditures and 2021 expected capital expenditures from multiyear projects of the Board and the Office of Inspector General. The capital budget reported for the Reserve Banks includes the amounts budgeted for the Federal Reserve Information Technology support function and the Office of Employee Benefits.

These strategic goals emphasize investments that continue to improve operational efficiencies, enhance services to Bank customers, and ensure a safe and productive work environment. Additionally, because several programs experienced pandemic-related delays in 2020, Reserve Banks' 2021 capital investments account for "COVID catch-up" work (that is, planned 2020 projects that were delayed or deferred to 2021 as a result of the pandemic).

Board of Governors Budgets

Board of Governors

The Board's budget is based on the principles established by the *Strategic Plan 2020–23* and provides funding to advance the plan's goals and objectives.[7] This functional alignment helps ensure organizational resources are used to advance the Board's mission and provide a structure to fund strategic priorities over the four-year time horizon.

The Board's budget process is as follows:

- At the start of the budget process, the chief operating officer and chief financial officer meet with the Committee on Board Affairs (CBA) to recommend a specific growth target for the Board's operating budget. For 2021, the recommended growth target included known changes in the run-rate of the Board's continuing operations, projected increases to retirement and post-retirement benefits, and strategic priorities for 2021. After endorsement by the CBA, Division of Financial Management (DFM) staff communicates the target to the Executive Committee, which comprises the directors of each division.
- To manage growth across the Board, the CBA identifies specific growth rates for each functional area: Monetary Policy and Financial Stability, Supervision, Payment System and Reserve Bank Oversight, Public Engagement and Community Development, and Mission Enablement (Support and Overhead).
- To achieve the CBA's growth target, divisions allocate resources to their highest priorities and seek tradeoffs and efficiencies.
- DFM staff review initial budget requests submitted by divisions and work collaboratively with all divisions and functional areas to achieve the growth target.
- The chief operating officer and chief financial officer subsequently brief the CBA on the budget submissions. Once the budget is finalized, the administrative governor submits the budget to the full Board for review and final approval.

[7] The Board approved the plan published in December 2019 and located at https://www.federalreserve.gov/publications/files/2020-2023-gpra-strategic-plan.pdf.

Table D.3. Operating expenses of the Board of Governors, by operating area, 2020–21
Millions of dollars, except as noted

Item	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Monetary policy and financial stability[1]	335.3	335.2	-0.1	0.0	364.1	28.9	8.6
Supervision	368.3	367.0	-1.3	-0.4	384.1	17.1	4.7
Payment system and Reserve Bank oversight	62.5	61.5	-0.9	-1.5	73.6	12.1	19.6
Public engagement and community development	48.3	47.2	-1.1	-2.3	47.7	0.5	1.0
Total, Board operations	**814.4**	**811.0**	**-3.4**	**-0.4**	**869.5**	**58.5**	**7.2**
Office of Inspector General	28.9	32.0	3.1	10.8	35.1	3.1	9.7

Note: This table presents financial performance for the Board's operating areas, which align with the Reserve Banks. Monetary policy and financial stability aligns with monetary and economic policy within the Reserve Banks; growth in 2021 is driven by employment growth. Supervision aligns with supervision and regulation within the Reserve Banks. Payment system and Reserve Bank oversight is an operating area unique to the Board; growth in 2021 is driven by shifting work from Supervision for several new Reserve Bank oversight programs. Public engagement and community development algins with services to financial institutions and the public within the Reserve Banks. Office of Inspector General growth in 2021 is driven by new positions driven by the COVID-19 pandemic response and the continually increasing importance of and risk associated with cybersecurity and information technology operations.

[1] Includes the Survey of Consumer Finances.

- DFM staff monitor expenses throughout the year. Quarterly financial forecasts provide insight into budgetary pressures. Staff analyze variances and reports the variances to senior management.

Tables D.3, D.4, and D.5 summarize the Board's 2020 budgeted and actual expenses and its 2021 budgeted expenses by operating area; division, office, or special account; and account classification, respectively. Table D.6 summarizes the Board's 2020 budgeted and actual authorized positions and its budgeted positions for 2021. Each table includes a line item for the Office of Inspector General (OIG), which is discussed later in this section.

2020 Budget Performance

Total expenses for Board operations were $811.0 million, which was $3.4 million, or 0.4 percent, lower than the approved 2020 budget of $814.4 million.

Personnel services expenses were $14.4 million, or 2.4 percent, higher than the approved budget, driven by higher accrued annual leave expenses as staff used less leave as a result of the COVID-19 pandemic. Goods and services expenses were $17.8 million, or 8.1 percent, lower than the approved budget as the COVID-19 pandemic resulted in less-than-planned travel and training activities and lower utilization of contractual professional services. The overrun in depreciation

Table D.4. Operating expenses of the Board of Governors, by division, office, or special account, 2020–21

Millions of dollars, except as noted

Division, office, or special account	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Research and Statistics	89.0	88.3	-0.7	-0.8	92.9	4.6	5.2
International Finance	36.4	34.7	-1.7	-4.5	37.1	2.4	6.8
Monetary Affairs	40.0	39.5	-0.6	-1.4	42.4	2.9	7.4
Financial Stability	14.3	14.6	0.3	2.1	16.3	1.7	11.4
Supervision and Regulation	122.6	116.4	-6.3	-5.1	123.2	6.9	5.9
Consumer and Community Affairs	34.4	34.2	-0.2	-0.7	35.7	1.6	4.6
Reserve Bank Operations and Payment Systems	45.0	43.5	-1.4	-3.2	46.7	3.2	7.3
Board Members	26.4	24.6	-1.9	-7.0	26.2	1.7	6.8
Secretary	9.4	9.4	0.0	-0.2	9.7	0.3	3.4
Legal	33.3	32.7	-0.6	-1.9	34.4	1.7	5.2
Chief Operating Officer	14.8	13.9	-0.9	-5.9	15.0	1.1	7.9
Financial Management	14.2	13.8	-0.4	-2.6	14.5	0.7	4.8
Information Technology	127.6	132.9	5.2	4.1	139.6	6.8	5.1
Management	163.6	163.8	0.1	0.1	167.3	3.5	2.2
Special projects[1]	13.0	23.9	10.9	83.5	11.4	-12.5	-52.4
Centrally managed benefits[2]	24.7	25.5	0.8	3.1	34.8	9.3	36.6
Extraordinary items[3]	25.9	12.7	-13.2	-50.9	40.4	27.7	218.1
Savings and reallocations[4]	-21.0	-14.0	7.0	-33.5	-20.3	-6.3	45.5
Survey of Consumer Finances[5]	0.7	0.7	0.0	0.0	2.1	1.4	202.3
Total, Board operations	**814.4**	**811.0**	**-3.4**	**-0.4**	**869.5**	**58.5**	**7.2**
Office of Inspector General	28.9	32.0	3.1	10.8	35.1	3.1	9.7

1 Includes centralized Boardwide benefit programs such as accrued annual leave.
2 Includes retirement and post-retirement benefits, which fluctuate due to changes in actuarial assumptions and demographics.
3 Includes several strategic projects, including the Martin renovation; replacement of the Board's human capital, finanical management, and procurement systems; and a centralized position pool.
4 Includes negative adjustments to reflect measured budget risks for large, complex projects and historical under execution. In addition, includes Board support and overhead allocations to the OIG (and Currency starting with the 2021 budget).
5 The survey collects information about family incomes, net worth, balance sheet components, credit use, and other financial outcomes, and is conducted every three years.

expenses is due to the write-off of a capital asset ahead of the planned renovation and the acceleration of IT hardware purchases.

The Board's 2020 single-year capital spending was less than budgeted by $2.3 million, or 11.8 percent. Multiyear capital projects remained within their overall project budgets; however, actual spending in 2020 was less than budgeted by $21.1 million, or 13.1 percent, due to delays

Table D.5. Operating expenses of the Board of Governors, by account classification, 2020–21
Millions of dollars, except as noted

Account classification	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Personnel services							
Salaries	477.4	489.8	12.4	2.6	500.8	11.0	2.2
Retirement/Thrift plans	62.8	64.0	1.2	1.9	70.2	6.2	9.7
Employee insurance and other benefits	42.3	42.4	0.1	0.3	43.8	1.4	3.3
Net periodic benefits costs[1]	11.1	11.8	0.7	6.1	16.5	4.7	39.9
Subtotal, personnel services	*593.6*	*608.0*	*14.4*	*2.4*	*631.3*	*23.3*	*3.8*
Goods and services							
Postage and shipping	0.4	0.3	-0.2	-36.0	0.6	0.4	130.3
Travel	15.7	4.5	-11.2	-71.3	9.4	4.9	108.7
Telecommunications	7.3	7.7	0.4	5.4	8.3	0.7	8.6
Printing and binding	0.6	0.5	-0.1	-16.6	0.7	0.2	47.3
Publications	0.4	0.3	-0.1	-17.7	0.3	0.0	5.3
Stationery and supplies	1.3	1.2	-0.1	-5.5	1.0	-0.1	-12.5
Software	21.7	21.1	-0.6	-2.9	29.2	8.2	38.7
Furniture and equipment (F&E)	6.2	7.1	0.9	14.1	6.1	-0.9	-13.0
Rentals	38.0	37.3	-0.6	-1.7	38.0	0.6	1.7
Data, news, and research	15.9	15.1	-0.8	-4.8	18.3	3.2	20.9
Utilities	1.7	1.9	0.2	12.1	1.7	-0.2	-10.3
Repairs and alterations—building	4.2	4.1	-0.2	-4.1	4.7	0.6	14.1
Repairs and maintenance—F&E	5.0	5.2	0.2	4.8	5.0	-0.2	-3.7
Contractual professional services	64.7	57.6	-7.1	-11.0	67.6	10.0	17.4
Interest	0.0	0.0	0.0	-587.4	0.0	0.0	-119.4
Training and dues	5.2	3.1	-2.0	-39.1	4.9	1.7	54.1
Subsidies and contributions	3.1	2.9	-0.1	-4.7	3.2	0.2	7.4
All other	3.5	3.2	-0.3	-8.8	4.0	0.8	23.8
Depreciation/amortization	44.2	47.6	3.4	7.8	56.2	8.6	18.1
Support and overhead allocations[2]	-14.0	-14.0	0.0	0.0	-16.9	-3.0	21.2
IT income[3]	-0.3	-0.2	0.1	-42.5	-0.3	-0.1	81.0
Income	-3.9	-3.6	0.3	-7.9	-3.9	-0.3	8.5
Subtotal, goods and services	*220.8*	*203.0*	*-17.8*	*-8.1*	*238.2*	*35.2*	*17.3*
Total, Board operations	**814.4**	**811.0**	**-3.4**	**-0.4**	**869.5**	**58.5**	**7.2**
Office of Inspector General							
Personnel services	28.5	28.9	0.5	1.6	30.9	2.0	6.8
Goods and services[4]	18.1	16.7	-1.4	-7.7	19.2	2.5	15.0
Subtotal, excluding operating income	*46.6*	*45.6*	*-0.9*	*-2.0*	*50.1*	*4.5*	*9.8*
Operating income[5]	-17.7	-13.6	4.0	-22.9	-15.0	-1.4	10.2
Total, OIG operations	**28.9**	**32.0**	**3.1**	**10.8**	**35.1**	**3.1**	**9.7**

[1] Net periodic benefits costs other than services costs related to pension and post-retirement benefits.
[2] Includes a net zero transfer of costs from the Board operating budget to the OIG and Currency operating budgets for Board support and overhead expenses attributable to the OIG and Currency.
[3] Includes other earned income collected from the Currency budget.
[4] Includes Board support and overhead allocations to the OIG.
[5] Starting with the 2020 budget, the OIG operating budget incorporated earned income from the Consumer Financial Protection Bureau.

Table D.6. Positions authorized by the Board of Governors, by division, office, or special account, 2020–21

Division, office, or special account	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Research and Statistics	356	356	0	0.0	356	0	0.0
International Finance	158	158	0	0.0	158	0	0.0
Monetary Affairs	171	171	0	0.0	171	0	0.0
Financial Stability	55	57	2	3.6	57	0	0.0
Supervision and Regulation	489	489	0	0.0	489	0	0.0
Consumer and Community Affairs	131	131	0	0.0	131	0	0.0
Reserve Bank Operations and Payment Systems	182	182	0	0.0	182	0	0.0
Board Members	121	121	0	0.0	121	0	0.0
Secretary	53	53	0	0.0	53	0	0.0
Legal	129	129	0	0.0	129	0	0.0
Chief Operating Officer	62	62	0	0.0	62	0	0.0
Financial Management	69	69	0	0.0	69	0	0.0
Information Technology	413	413	0	0.0	413	0	0.0
Management	477	478	1	0.2	478	0	0.0
Extraordinary items[1]	13	10	-3	-23.1	14	4	40.0
Total, Board operations	**2,879**	**2,879**	**0**	**0.0**	**2,883**	**4**	**0.1**
Office of Inspector General	133	134	1	0.8	140	6	4.5

Note: Budget represents authorized position count at the beginning of the year and actual represents authorized position count at year-end.
[1] Centralized position pool used for strategic areas of growth.

in building improvement and automation projects. Table D.7 summarizes the Board's budgeted and actual capital expenditures for 2020 and 2021.

2021 Operating Expense Budget

The 2021 budget for Board operations is $869.5 million, which is $58.5 million, or 7.2 percent, higher than 2020 actual expenses. Staff formulated the operating budget to advance the Board's strategic priorities, and it includes initiatives that support policy deliberations; promote safety, soundness, and stability of financial institutions; foster a safe, efficient, and accessible payment and settlement system; promote broader, ongoing engagement with the public; and optimize operations.

In addition, the 2021 budget includes employment growth expected to occur in 2021; funding for the Board's compensation and benefit programs; projected increases to centrally managed retirement and post-retirement benefits, which fluctuate with changes in actuarial assumptions and demographics; and ongoing facilities and automation projects.

Table D.7. Capital expenditures of the Board of Governors, by capital type, 2020–21
Millions of dollars, except as noted

Item	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Board							
Single-year capital expenditures	19.2	17.0	-2.3	-11.8	18.4	1.5	8.6
Multiyear capital expenditures	160.8	139.7	-21.1	-13.1	162.3	22.6	16.2
Total capital expenditures	**180.0**	**156.6**	**-23.4**	**-13.0**	**180.7**	**24.1**	**15.4**
Office of Inspector General							
Single-year capital expenditures	0.8	0.6	-0.2	-23.7	0.1	-0.5	-88.1
Multiyear capital expenditures	0.0	0.0	0.0	n/a	0.0	0.0	n/a
Total capital expenditures	**0.8**	**0.6**	**-0.2**	**-23.7**	**0.1**	**-0.5**	**-88.1**
Board and OIG total capital expenditures	**180.8**	**157.2**	**-23.6**	**-13.0**	**180.8**	**23.6**	**15.0**

Note: The amount reported for the multi-year capital budget represents the expected expenditure for the budget year.
n/a Not applicable.

Authorized positions for 2021 are 2,883, an increase of 4 over the 2020 authorized number, to replenish positions allocated to divisions from the centralized position pool.

2021 Capital Budgets

The Board's 2021 single-year capital budget totals $18.4 million, which is $1.5 million, or 8.6 percent, higher than 2020 actual capital expenditures. The increase reflects routine lifecycle replacements of equipment and building components.

The Board's multiyear capital budget is driven by facilities projects. Expected capital expenditures in 2021 total $162.3 million and reflect the Board's commitment to provide a secure, modern environment that meets the needs of the workforce and leverages opportunities to increase collaboration, efficiency, productivity, and sustainability. Table D.7 summarizes the Board's budgeted and actual capital expenditures for 2020 and 2021.

Office of Inspector General

The budget for the Board's OIG is grounded in the goals established in its strategic plan.[8] The goals are to deliver results that promote agency excellence; promote a diverse, skilled, and engaged workforce and foster an inclusive, collaborative environment; optimize external stake-

[8] The plan is located at https://oig.federalreserve.gov/strategic-plan.htm.

holder engagement; and advance organizational effectiveness and model a culture of continuous improvement.

In keeping with its statutory independence, the OIG prepares its proposed budget apart from the Board's budget. The OIG presents its budget directly to the Board for approval.

2020 Budget Performance

Expenses for OIG operations, excluding operating income, were $45.6 million, which was $0.9 million, or 2.0 percent, lower than the approved 2020 budget of $46.6 million. Personnel services expenses exceeded the approved budget amount by $0.5 million, or 1.6 percent, driven by higher accrued annual leave expenses as staff used less leave as a result of the COVID-19 pandemic.

Goods and services expenses were $1.4 million, or 7.7 percent, lower than the approved budget amount, driven by the effect of the COVID-19 pandemic on travel and training activities. Operating income was $4.0 million, or 22.9 percent, lower than the approved budget amount, because the office conducted less work related to the Consumer Financial Protection Bureau than planned. Including operating income, total expenses for OIG operations were $32.0 million in 2020. The OIG's single-year capital spending was $0.2 million, or 23.7 percent, lower than the approved budget amount.

2021 Operating Expense Budget

The 2021 budget for OIG operations, excluding operating income, is $50.1 million, which is $4.5 million, or 9.8 percent, higher than 2020 actual expenses. This increase is driven by expected employment growth in 2021, funding for the Board's compensation and benefit programs, and escalations for goods and services. Employment growth is expected to cause accompanying increases in support and overhead expenses. Including operating income, the 2021 budget for OIG operations is $35.1 million.

The OIG has 140 authorized positions for 2021, an increase of 6 over the authorized number for 2020. The increase in authorized positions is driven by anticipated oversight work associated with the Board's COVID-19 pandemic response and the continually increasing importance of and risk associated with cybersecurity and information technology operations.

2021 Capital Budget

The OIG's 2021 single-year capital budget totals $0.1 million, which is $0.5 million, or 88.1 percent, lower than 2020 actual capital expenditures. The decrease is driven by fewer anticipated equipment replacements as well as the completion of a software enhancement project in 2020. Table D.7 summarizes the OIG's budgeted and actual capital expenditures for 2020 and 2021.

Federal Reserve Banks Budgets

Each Reserve Bank establishes operating goals for the coming year that are aligned with the System's key strategic objectives, devises strategies for attaining those goals, estimates required resources, and monitors results. The Reserve Banks structure their budgets around specific functional areas reflecting the core responsibilities of the Federal Reserve:

- contributing to the formulation of monetary policy and enhancing monetary policy implementation to become more effective, flexible, and resilient, including through public communication, outreach, and economic education
- promoting financial stability through effective monitoring, analysis, and policy development
- promoting safety and soundness of financial institutions through effective supervision
- leading efforts to enhance the security, resiliency, functionality, and efficiency of services provided to financial institutions and the public

The Reserve Bank budget process is as follows:

- The Conference of Presidents, operating through its Committee on Spending Stewardship, defines, in close consultation with the Board's Committee on Federal Reserve Bank Affairs (BAC), key strategic objectives for the System. Considering longer-term environmental trends and historical growth rates of expense, these governance bodies articulate an aggregate System-level growth expectation for a multiyear period.
- The Reserve Banks develop budgets that reflect this direction, through framing and making appropriate trade-offs, and senior leadership in the Reserve Banks reviews the budgets for alignment with Reserve Bank and System priorities.
- The Reserve Banks submit for Board review preliminary budget information, including documentation to support the budget request.
- Board staff analyzes the Banks' budgets, both individually and in the context of System initiatives.
- Expenses associated with services provided to the Treasury require authorization from the Bureau of the Fiscal Service.
- The BAC reviews the Bank budgets.
- The Reserve Banks make any needed changes, and the BAC chair submits the revised budgets to Board members for review and final action.
- Throughout the year, Reserve Bank and Board staffs monitor actual performance and compare it with approved budgets and forecasts.

In addition to the budget approval process, the Reserve Banks must submit proposals for certain capital expenditures to the Board for further review and approval.

Table D.8. Operating expenses of the Federal Reserve Banks, by District, 2020–21
Millions of dollars, except as noted

District	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Boston	239.6	265.8	26.2	10.9	312.2	46.4	17.5
New York	1,076.9	1,089.6	12.8	1.2	1,122.7	33.0	3.0
Philadelphia	199.4	196.4	-2.9	-1.5	210.7	14.3	7.3
Cleveland	230.2	224.9	-5.3	-2.3	236.4	11.4	5.1
Richmond	517.7	528.4	10.7	2.1	546.2	17.8	3.4
Atlanta	414.1	410.1	-4.0	-1.0	425.1	15.0	3.7
Chicago	423.7	412.0	-11.7	-2.8	453.5	41.4	10.1
St. Louis	437.3	412.6	-24.7	-5.7	446.8	34.2	8.3
Minneapolis	183.1	184.9	1.8	1.0	193.2	8.3	4.5
Kansas City	364.4	353.2	-11.2	-3.1	381.9	28.7	8.1
Dallas	243.3	244.3	0.9	0.4	258.2	13.9	5.7
San Francisco	441.4	440.7	-0.7	-0.2	443.0	2.3	0.5
Total Reserve Bank operating expenses	**4,771.2**	**4,763.0**	**-8.2**	**-0.2**	**5,029.8**	**266.8**	**5.6**

Note: Includes expenses of the Federal Reserve Information Technology support function and the Office of Employee Benefits and reflects all redistributions for support and allocation for overhead. Excludes Reserve Bank capital expenditures as well as assessments by the Board of Governors for costs related to currency and the operations of the Board of Governors and the Consumer Financial Protection Bureau.

Tables D.8, D.9, and D.10 summarize the Reserve Banks' 2020 budgeted and actual expenses and 2021 budgeted expenses by Reserve Bank, functional area, and account classification.[9] Table D.11 shows the Reserve Banks' budgeted and actual employment for 2020 and budgeted employment for 2021. In addition, table D.12 shows the Reserve Banks' budgeted and actual capital expenditures for 2020 and budgeted capital for 2021.

2020 Budget Performance

Total 2020 operating expenses for the Reserve Banks were $4,763.0 million, which is $8.2 million, or 0.2 percent, less than the approved 2020 budget of $4,771.2 million. The actual average number of personnel (ANP) was 20,128, an overrun of 230 ANP, or 1.2 percent, from 2020 budgeted staffing levels. The COVID-19 pandemic resulted in significantly less than budgeted expenses in travel and meetings. These underruns were largely offset by resources for the liquidity and lending facilities, the unexpected costs to support the continued operation of the Federal Reserve Banks during the COVID-19 pandemic, and investments to support the Federal Reserve's

[9] Additional information about the operating expenses of each of the Reserve Banks can be found in appendix G, "Statistical Tables" (see "Table G.9, Income and expenses of the Federal Reserve Banks, by Bank").

Table D.9. Operating expenses of the Federal Reserve Banks, by operating area, 2020–21
Millions of dollars, except as noted

Operating area	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Monetary and economic policy	786.3	805.1	18.8	2.4	845.4	40.3	5.0
Services to the U.S. Treasury and other government agencies	668.2	619.9	-48.3	-7.2	657.8	37.8	6.1
Services to financial institutions and the public[1]	1,296.4	1,345.1	48.6	3.8	1,384.6	39.6	2.9
Supervision and regulation	1,518.0	1,467.4	-50.5	-3.3	1,551.2	83.7	5.7
Fee-based services to financial institutions[2]	502.3	525.5	23.2	4.6	590.9	65.4	12.4
Total Reserve Bank operating expenses[3]	**4,771.2**	**4,763.0**	**-8.2**	**-0.2**	**5,029.8**	**266.8**	**5.6**

1 Services to financial institutions and the public includes cash services.
2 Includes operating expenses related to development of the FedNow Service.
3 Operating expenses exclude pension costs, reimbursements, and operating expense of the Board of Governors (see table D.4).

commitment to modernize the nation's payment system and establish a safe and efficient foundation for the future via the FedNow Service initiative.

The Reserve Banks' 2020 capital expenditures were less than budgeted by $219.0 million, or 41.3 percent, primarily driven by plan changes because of the COVID-19 pandemic, including timing and scope for building-related initiatives.

2021 Operating Expense Budget

The 2021 operating budgets of the Reserve Banks total $5,029.8 million, which is $266.8 million, or 5.6 percent, higher than 2020 actual expenses.[10] Growth in monetary policy reflects increased resources dedicated to regional economic research, including studies on inflation and low- and moderate-income communities. Treasury expenses are increasing primarily to accommodate new applications, the modernization of existing applications, and the migration of applications into the Federal Reserve environment, as well as investments to infrastructure platforms, including the Treasury Web Applications Infrastructure (TWAI) platform and a secure cloud platform for Treasury applications. Additionally, increases in cash expenses are driven by the second phase of NextGen. Supervision growth has moderated because of more-efficient oversight focusing on

10 On December 10, 2020, the Board approved the 2021 Reserve Bank operating budgets totaling $5,029.8 million, including $657.8 million in Treasury services. Because the U.S. Department of the Treasury's Bureau of the Fiscal Service (Fiscal Service) had not fully determined the level of funding for fiscal services provided by the Federal Reserve

Table D.10. Operating expenses of the Federal Reserve Banks, by account classification, 2020–21
Millions of dollars, except as noted

Account classification	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Salaries and other benefits[1]	3,504.5	3,589.1	84.6	2.4	3,800.4	211.3	5.9
Building	354.0	350.0	-4.0	-1.1	346.9	-3.1	-0.9
Software costs	329.4	305.5	-23.9	-7.3	342.0	36.5	11.9
Equipment	194.5	194.0	-0.5	-0.3	234.8	40.8	21.0
Recoveries[2]	-383.6	-377.1	6.5	-1.7	-381.9	-4.9	1.3
Expenses capitalized	-90.0	-79.0	11.0	-12.2	-137.5	-58.5	74.1
All other[3]	862.3	780.4	-81.9	-9.5	825.1	44.7	5.7
Total Reserve Bank operating expenses	**4,771.2**	**4,763.0**	**-8.2**	**-0.2**	**5,029.8**	**266.7**	**5.6**

[1] Includes salaries, other personnel expense, and retirement and other employment benefit expenses. It does not include pension expenses related to all the participants in the Retirement Plan for Employees of the Federal Reserve System and the Reserve Bank participants in the Benefit Equalization Plan and the Supplemental Retirement Plan for Select Officers of the Federal Reserve Banks. These expenses are recorded as a separate line item in the financial statements; see "Table G.9. Income and expenses of the Federal Reserve Banks, by Bank" in appendix G, "Statistical Tables."
[2] Includes tenant rent recoveries.
[3] Includes fees, materials and supplies, travel, communications, and shipping.

areas of risk and allocating resources to the highest priorities. Increases in fee-based services reflect investments in FedNow Service.

Total 2021 budgeted employment for the Reserve Banks, Federal Reserve Information Technology (FRIT), and the Office of Employee Benefits (OEB) is 20,652 ANP, an increase of 524 ANP, or 2.6 percent, from 2020 actual employment levels. A key driver of this resource increase is support for the FedNow Service. Other primary sources of growth are the national support functions, in which additional resources are planned to support System strategic initiatives in procurement, finance, and human resource management; further centralize support functions to realize economies of scale; and enhance product offerings and ensure the security and resiliency of the FedLine Solutions.[11] Further contributing to the growth are resources to support ongoing currency opera-

Banks in time for a sufficient review, the portion of the 2021 Banks' budgets associated with services to the Treasury was not considered final. The subsequent reductions identified by Fiscal Service constituted less than the 1 percent threshold for such adjustments explicitly specified in the Board's approval, and consequently the final budgets were approved by the director of the Division of Reserve Bank Operations and Payment Systems under limited delegated authority. Additional information is available at https://www.federalreserve.gov/foia/files/2021ReserveBankBudgets.pdf.

In addition, the chair of the BAC designated a portion of the 2021 operating expense budgets associated with selected investments in the Treasury and the OEB for conditional approval. Subsequently, the director of the Board's Division of Reserve Bank Operations and Payment Systems, acting under limited delegated authority, similarly designated reductions identified by Fiscal Service, bringing total conditionally approved operating expenses to $40.1 million, requiring additional review and approval by the director of the Division of Reserve Bank Operations and Payment Systems.

[11] Enhancements to the FedLine Solutions include a multiyear transformational effort focused on evolving the FedLine network, authentication, and hosting infrastructure to meet customer, industry, and Federal Reserve System needs.

Table D.11. Employment at the Federal Reserve Banks, by District, and at FRIT and OEB, 2020–21

District	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Boston	1,055	1,030	-25	-2.3	1254	224	21.7
New York	3,223	3,204	-19	-0.6	3218	14	0.4
Philadelphia	864	887	23	2.7	881	-6	-0.7
Cleveland	1,030	1,028	-2	-0.2	1052	23	2.3
Richmond	1,460	1,500	41	2.8	1514	13	0.9
Atlanta	1,730	1,734	3	0.2	1734	0	0.0
Chicago	1,606	1,618	12	0.7	1676	57	3.6
St. Louis	1,415	1,442	27	1.9	1458	16	1.1
Minneapolis	1,054	1,068	14	1.3	1088	20	1.8
Kansas City	2,064	2,092	27	1.3	2096	4	0.2
Dallas	1,278	1,297	18	1.4	1323	27	2.0
San Francisco	1,762	1,800	38	2.2	1826	27	1.5
Total, all Districts	**18,542**	**18,702**	**160**	**0.9**	**19120**	**418**	**2.2**
Federal Reserve Information Technology	1,295	1,365	70	5.4	1,465	100	7.3
Office of Employee Benefits	61	61	0	0.0	67	5	8.6
Total	**19,898**	**20,128**	**230**	**1.2**	**20,652**	**524**	**2.6**

tions and the NextGen program as well as community development initiatives, regional economic research, and outreach initiatives.

Reserve Bank officer and staff personnel expenses for 2021 total $2,964.1 million, an increase of $168.4 million, or 6.0 percent, from 2020 actual expenses. The increase reflects expenses associated with additional staff and budgeted salary administration adjustments.[12]

The 2021 Reserve Bank budgets include a salary administration program for eligible officers, senior professionals, and staff totaling $110.6 million and a variable pay program totaling $242.0 million.

2021 Capital Budgets

The 2021 capital budgets for the Reserve Banks, FRIT, and OEB total $598.9 million.[13] The increase in the 2021 capital budget is $287.0 million, or 92.0 percent, greater than the 2020

[12] The salary administration program includes a budgeted pool for merit increases, equity adjustments, and promotions.

[13] The Board delegated the approval of the resources for services provided to the Treasury to the director of the Division of Reserve Bank Operations and Payment Systems pending final authorization from the Bureau of the Fiscal Service. The

Table D.12. Capital expenditures of the Federal Reserve Banks, by District, and of FRIT and OEB, 2020–21

Millions of dollars, except as noted

District	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Boston	21.7	11.1	-10.6	-48.7	85.3	74.2	666.8
New York[1]	87.6	-30.7	-118.3	-135.1	78.8	109.5	-356.8
Philadelphia	75.3	55.8	-19.5	-25.9	54.8	-1.0	-1.8
Cleveland	25.9	24.9	-0.9	-3.5	28.0	3.1	12.4
Richmond	20.8	6.8	-14.0	-67.1	17.7	10.9	159.7
Atlanta	26.9	9.9	-17.0	-63.3	34.2	24.4	247.4
Chicago	21.4	15.2	-6.2	-29.1	32.6	17.4	114.6
St. Louis	15.2	5.3	-9.9	-65.4	19.4	14.1	268.3
Minneapolis	12.6	11.5	-1.1	-8.8	25.6	14.1	123.1
Kansas City	44.6	43.2	-1.5	-3.3	35.9	-7.3	-16.9
Dallas	27.0	8.6	-18.4	-68.1	26.8	18.2	211.0
San Francisco	63.8	60.1	-3.6	-5.7	82.8	22.6	37.7
Total, all Districts	**442.7**	**221.7**	**-221.0**	**-49.9**	**521.9**	**300.2**	**135.4**
Federal Reserve Information Technology	84.8	85.5	0.7	0.8	76.8	-8.7	-10.2
Office of Employee Benefits	3.4	4.7	1.3	37.7	0.2	-4.5	-95.7
Total	**530.9**	**311.9**	**-219.0**	**-41.3**	**598.9**	**287.0**	**92.0**

[1] New York's 2020 actual capital outlays include $75.9 million of asset impairments, most notably for the write-off of the Technology Improvements of Treasury Auction (TITAN) initiative.

actual levels of $311.9 million, largely reflecting ongoing multiyear IT and building strategic initiatives, some of which were paused in 2020 because of the COVID-19 pandemic. Initiatives in the 2021 capital budget support major workspace renovations, address aging building infrastructure in several Reserve Banks, improve IT infrastructure, and provide application upgrades and releases.

Capital Expenditures Designated for Conditional Approval

The BAC chair designated projects with an aggregate cost of $114.6 million in 2021 for conditional approval, requiring additional review and approval by the director of the Board's Division of Reserve Bank Operations and Payment Systems before the funds are committed.[14] The expenditures designated for conditional approval by the chair of the BAC include large-scale building proj-

2021 capital budget, including those capital expenditures designated for conditional approval, reflect the final authorization from Fiscal Service.

[14] Generally, capital expenditures that are designated for conditional approval include certain building projects, District expenditures that substantially affect or influence future System direction or the manner in which significant services

ects to renovate office space and update building infrastructure. Technology projects include support for services performed on behalf of the Treasury, investments for FedNow Service, and NextGen.

Other Capital Expenditures

Significant capital expenditures (typically expenditures exceeding $1 million) that are not designated for conditional approval include total multiyear budgeted expenditures of $948.1 million for 2021 and future years, of which the single-year 2021 budgeted expenditures are $381.1 million. This category includes building expenditures for office space renovations, mechanical and electrical infrastructure upgrades, building automation, and security enhancements. IT projects include ongoing infrastructure investments; initiatives that enable better access to data and enhance cybersecurity and cyberresiliency; and applications to support fee-based services, supervision, cash, and open market operations.

Capital initiatives that are individually less than $1 million are budgeted at an aggregate amount of $103.2 million for 2021 and include building maintenance expenditures, scheduled software and equipment upgrades, and equipment and furniture replacements.

Currency Budget

The currency budget provides funds to reimburse the Treasury's Bureau of Engraving and Printing (BEP) for expenses related to the production of banknotes, and the Board's activities related to its role as issuing authority of the nation's currency in the form of Federal Reserve notes.[15] As issuing authority, the Board works closely with its strategic partners, such as the Reserve Banks, the Department of the Treasury, the BEP, and the U.S. Secret Service to help maintain the integrity of and public confidence in our nation's currency.

The Board works to ensure that the notes meet quality standards from production through destruction, monitors counterfeiting risks and threats for each denomination, contributes to the development of security features and new design concepts, and conducts adversarial analysis to ensure the security features and designs are robust against counterfeiting. The budget includes activities that support its issuing authority role, the cost of shipping new currency from the BEP to Reserve Banks and fit currency between Reserve Banks, and funds the Currency Education Program (CEP). The CEP aims to protect and maintain confidence in U.S. currency worldwide, working closely with

are performed, expenditures that may be inconsistent with System direction or vary from previously negotiated purchasing agreements, and local expenditures that duplicate national efforts.

[15] As mandated by the Federal Reserve Act, section 16, the Board reimburses the BEP for all costs related to the production of Federal Reserve notes. Section 16 of the Federal Reserve Act also requires that all costs incurred for the issuing of notes shall be paid for by the Board and included in its assessments to the Reserve Banks. All operations and capital investments of the BEP are financed by a revolving fund that is reimbursed through product sales, nearly all of which are sales of Federal Reserve notes to the Board to fulfill its annual print order.

other agencies and departments of the U.S. government, to provide information and conduct outreach through a variety of channels.

The annual currency budget process is as follows:

- Each year, under authority delegated by the Board, the director of the Division of Reserve Bank Operations and Payment Systems submits a fiscal year print order for notes to the director of the BEP.[16]
- The BEP forecasts expenses for the calendar-year currency budget, including fixed and variable costs for printing Federal Reserve notes, facility costs, and support costs. Board staff develop budgets for Board expenses in relation to strategic guidance set by Cash leadership.
- The BAC reviews the proposed currency budget.
- The BAC chair submits the proposed currency budget to Board members for review and final action.

2020 Budget Performance

The Board's 2020 actual operating expenses for new currency were $831.1 million, $46.1 million, or 5.3 percent, below the budgeted amount for 2020. The budget underrun is primarily attributable to the postponement of facility reimbursements to the BEP.

The cost underrun is partially offset by a cost overrun in variable production and transportation costs due to the COVID-19 pandemic-related demand for currency. The 2020 banknote development underrun is primarily the result of a contract termination for design services, delays for several projects that were initially affected by the COVID-19 pandemic, and new contracts that took longer to procure than anticipated.

2021 Budget

Table D.13 summarizes the 2021 currency operating budget of $1,095.8 million.[17] The proposed 2021 operating budget represents an increase of $264.8 million, or 31.9 percent, from 2020 actual expenses. BEP costs associated with the printing of Federal Reserve notes are 94.0 percent of the operating budget. Board expenses for currency transportation, banknote development, and currency education comprise the remaining 6.0 percent of the operating budget.

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[16] The Board delivers the annual print order to the BEP director in August of each year, and copies are available on the Board's public website at https://www.federalreserve.gov/paymentsystems/coin_currency_orders.htm.

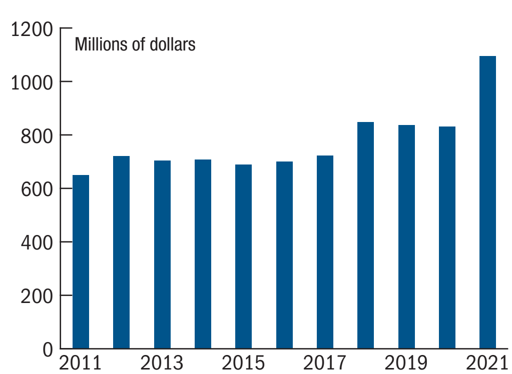
[17] In 2018, the Board approved a $3.2 million multicycle capital budget for counterfeit inspection information technology equipment. In 2021, no additional capital funds were requested.

Table D.13. Federal Reserve currency budget, 2020–21
Millions of dollars, except as noted

Item	2020 budget	2020 actual	Variance 2020 actual to 2020 budget		2021 budget	Variance 2021 budget to 2020 actual	
			Amount	Percent		Amount	Percent
Printing Federal Reserve notes							
BEP fixed printing costs	499.8	475.8	-24.0	-4.8	518.6	42.8	9.0
BEP variable printing costs	233.1	302.6	69.5	29.8	456.8	154.2	51.0
BEP facility reimbursements							
Fort Worth facility expansion	60.0	0.0	-60.0	-100.0	0.0	0.0	0.0
D.C. facility design work	30.0	0.0	-30.0	-100.0	49.6	49.6	n/a
BEP support costs							
Currency reader	1.0	0.9	-0.1	-7.0	1.1	0.2	20.7
Destruction and compliance	3.8	4.1	0.3	7.9	3.9	-0.2	-4.6
Board expenses							
Currency transportation	19.0	25.0	6.0	31.5	33.6	8.6	34.3
Banknote development[1]	27.0	18.8	-8.2	-30.4	26.4	7.6	40.6
Currency education[1]	3.5	3.9	0.4	11.8	5.9	2.0	49.9
Operating budget	**877.2**	**831.1**	**-46.1**	**-5.3**	**1,095.8**	**264.8**	**31.9**

n/a Not applicable.
[1] Personnel, travel, and training costs were previously displayed as line items in the budget. These costs are now included in the Banknote development and Currency education budget categories that they support.

Figure D.4. Federal Reserve costs for currency, 2011–21



Note: For 2021, budgeted.

BEP Costs

The proposed 2021 budget to fund the BEP expenses associated with the printing of Federal Reserve notes is $1,030.0 million, which is $246.6 million, or 31.5 percent, greater than 2020 actual expenses. The primary driver of this increase is higher printing costs due to the continued demand for currency from the COVID-19 pandemic.

The proposed budget for fixed printing costs is $518.6 million, which is $42.8 million, or 9.0 percent, greater than 2020 actual expenses. The increase is primarily attributable to pandemic-related expenses, including additional healthcare staff, disinfection services, and information technology support. Pay increases and increased staffing to fill vacancies also contribute to the growth.

Variable costs are increasing because of the higher volume print order and denominational mix, which is skewed to the higher-denomination notes that are more expensive to produce. The budgeted 2021 calendar year note deliveries are increasing 31.9 percent from the 2020 actual deliveries. The corresponding 2021 budget for variable printing costs is 51.0 percent higher than the 2020 actual costs, including an increase of about $24.0 million for new paper contracts.

The increase in BEP facility reimbursements represent the Board's plan to resume reimbursement of the new BEP building project in Washington, D.C. The total cost of the new facility and production machinery in Washington, D.C., is estimated to be $1.4 billion over the life of the project, which began in 2019 and is expected to be completed in 2030. This project is in the development stage, and the Board expects to reimburse the BEP $49.6 million for design and site demolition costs in 2021.

Board Costs

Board costs are estimated to be $65.8 million, or 38.1 percent, more than 2020 actual expenses. The increase is primarily driven by currency transportation costs due to the higher volume of notes to ship, higher denomination allocation, and alternate transportation methods for business continuity purposes.[18]

The Banknote development budget increases include contract services to develop prototype equipment to assess quality at the BEP. The Board will also conduct market research to identify trends in the market for equipment that accepts and dispenses banknotes. Contract resources will support financial management and construction oversight for reimbursements of the new Washington D.C. currency production facility. The budget includes funding for the Counterfeit Currency Processing Facility (CCPF) initiative to support counterfeit deterrent activities to develop prototype technology to identify, analyze, and classify suspect counterfeit notes.

In 2021, Currency education will broaden its domestic and international outreach to businesses and consumers, create digital content that supports both classroom and remote learning options, and maintain the uscurrency.gov educational website. Increases include both contract and personnel expenses, including one additional authorized position from the 2020 budget.

The Banknote development and Currency education budget categories also include increases of $1.2 million and $1.0 million, respectively, for support and overhead costs, which have been transferred to these programs from the Board's budget based on authorized positions.[19]

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[18] The higher denominations typically ship by air, making their shipment costs higher than those of lower denominations, which ship over the road. Alternative transportation methods include chartered air service, which is more expensive than traditional shipment options but provides flexibility and resiliency.

[19] Beginning in 2021, the Currency budget will include support and overhead costs from the Board of Governors for enterprise information technology, facilities, law enforcement, human resources, and other services.

2021 Capital Budget

In 2018, the Board approved a $3.2 million multicycle capital budget, of which, $0.2 million is budgeted in 2021 for information technology development in support of the CCPF initiative.

E | Record of Policy Actions of the Board of Governors

Policy actions of the Board of Governors are presented pursuant to section 10 of the Federal Reserve Act. That section provides that the Board shall keep a record of all questions of policy determined by the Board and shall include in its annual report to Congress a full account of such actions. This appendix provides a summary of policy actions in 2020, including actions taken to support market functioning and the flow of credit to the economy following the outbreak of the coronavirus pandemic and associated containment measures (the COVID event). Policy actions were implemented through (1) rules and regulations, (2) policy statements and other actions, (3) special facilities, and (4) discount rates for depository institutions. More information on the actions is available from the relevant *Federal Register* notices or other documents (see links in footnotes) or on request from the Board's Freedom of Information Office. This appendix also provides information on the Board and the Government Performance and Results Act.

For information on the Federal Open Market Committee's policy actions relating to open market operations, see appendix B, "Minutes of Federal Open Market Committee Meetings."

Rules and Regulations

Regulation D (Reserve Requirements of Depository Institutions)

Effective March 24, 2020 (changes to reserve requirement ratios applicable on March 26, 2020). On March 15, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1702) to lower reserve ratios on transaction accounts maintained at depository institutions to 0 percent.[1] In January 2019, the Federal Open Market Committee (FOMC) announced its intention to implement an ample-reserves regime. Reserve requirements do not play a significant role in this operating framework. The interim final rule eliminates reserve requirements for thousands of depository institutions and helps to support lending to households and businesses.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective April 24, 2020. On April 23, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1715) to delete the six-per-month limit on convenient transfers and

[1] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-03-24/html/2020-05806.htm.

withdrawals that may be made from "savings deposits."[2] Regulation D distinguishes between reservable "transaction accounts" and non-reservable "savings deposits" based on the ease with which the depositor may make transfers or withdrawals from the account. Effective March 26, 2020, reserve requirement ratios were reduced to 0 percent, thus eliminating reserve requirements for thousands of depository institutions and rendering the regulatory distinction between the two types of accounts unnecessary. The interim final rule permits, but does not require, depository institutions to allow their customers to make an unlimited number of convenient transfers and withdrawals from their savings deposits at a time when financial events associated with the COVID event have made such access more urgent.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective March 12, 2021. On December 21, 2020, the Board approved a final rule (Docket No. R-1702) to adopt without change the interim final rule approved on March 15, 2020, to lower reserve requirement ratios on transaction accounts maintained at depository institutions to 0 percent.[3]

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman. **Abstaining:** Governor Waller.

Regulations H (Membership of State Banking Institutions in the Federal Reserve System) and Q (Capital Adequacy of Bank Holding Companies, Savings and Loan Holding Companies, and State Member Banks)

Effective June 1, 2020. On May 15, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1718), issued jointly with the Federal Deposit Insurance Corporation (FDIC) and Office of the Comptroller of the Currency (OCC) (together with the Board, "the agencies"), to temporarily revise the supplementary leverage ratio (SLR) calculation for depository institutions, in light of disruptions in economic conditions caused by the COVID event.[4] Under the interim final rule, depository institutions may choose to exclude U.S. Treasury securities and deposits at Federal Reserve Banks from the SLR calculation through the first quarter of 2021. If a depository institution does change its SLR calculation, it will be required to request approval from its primary federal banking regulator before making capital distributions, such as paying dividends to its parent company, for as long as the exclusion is in effect.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

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[2] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-04-28/html/2020-09044.htm.
[3] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2021-02-10/html/2020-28756.htm.
[4] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-06-01/html/2020-10962.htm.

Regulation O (Loans to Executive Officers, Directors, and Principal Shareholders of Member Banks)

Effective April 22, 2020. On April 17, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1714) to except Paycheck Protection Program (PPP) loans made through June 30, 2020, from requirements limiting the types and quantity of loans that certain bank directors, shareholders, officers, and businesses owned by these persons can receive from their related banks.[5] To bolster the effectiveness of the Small Business Administration's (SBA's) PPP in light of the COVID event, the interim final rule excepts from the requirements of section 22(h) of the Federal Reserve Act and certain provisions of the Board's Regulation O loans guaranteed under the PPP and not prohibited by the SBA's lending restrictions, subject to certain limits. The interim final rule prohibits a banking organization from favoring, in processing time or prioritization, a PPP application of one of its directors or shareholders.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective July 16, 2020. On July 12, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1722) to extend through August 8, 2020, the exception for PPP loans from limits on the types and quantity of loans that certain bank directors, shareholders, officers, and businesses owned by these persons can receive from their related banks.[6] Note: On February 5, 2021, the Board approved an interim final rule and request for comment (Docket No. R-1740) to extend this exception for PPP loans through March 31, 2021.[7]

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Regulation Q (Capital Adequacy of Bank Holding Companies, Savings and Loan Holding Companies, and State Member Banks)

Effective March 20, 2020. On March 17, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1703), issued jointly with the FDIC and OCC, to revise the definition of "eligible retained income" for all depository institutions, bank holding companies, and savings and loan holding companies (together, "banking organizations") subject to the agencies' capital rules.[8] The interim final rule facilitates the use of banking organizations' capital buffers to promote lending activity to households and businesses, in light of the COVID event. The revised definition of eligible retained income will make any automatic limitations on capital distributions that could apply under the agencies' capital rules more gradual.

[5] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-04-22/html/2020-08574.htm.
[6] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-07-16/html/2020-15367.htm.
[7] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2021-02-17/html/2021-02966.htm.
[8] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-03-20/html/2020-06051.htm.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Abstaining:** Governor Brainard.

Effective March 23, 2020. On March 19, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1705), issued jointly with the FDIC and OCC, to facilitate lending under the Money Market Mutual Fund Liquidity Facility (MMLF).[9] The Board had authorized the establishment of the MMLF to provide liquidity to the money market sector and help stabilize the financial system in light of the strains on the economy due to the COVID event. The interim final rule allows banking organizations to neutralize the regulatory capital effects of participating in the MMLF. This capital treatment is also extended to the community bank leverage ratio.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective March 31, 2020. On March 26, 2020, the Board approved a notice (Docket No. R-1629), issued jointly with the FDIC and OCC, to allow depository institutions and depository institution holding companies to implement the Standardized Approach for Calculating the Exposure Amount of Derivative Contracts (SA-CCR) for the first quarter of 2020, on a best-efforts basis, to help improve market liquidity and smooth disruptions caused by the COVID event.[10] The SA-CCR final rule was finalized by the agencies in November 2019, with an effective date of April 1, 2020.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective March 31, 2020. On March 27, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1708), issued jointly with the FDIC and OCC, to delay the estimated impact on regulatory capital of the implementation of the Current Expected Credit Losses (CECL) accounting standard.[11] The interim final rule provides banking organizations that implement CECL in 2020 with the option to delay for two years an estimate of CECL's effect on regulatory capital, relative to the incurred loss methodology's effect on regulatory capital, followed by a three-year transition period. The agencies provided this relief to allow such banking organizations to better focus on supporting lending to creditworthy households and businesses in light of disruptions in economic conditions caused by the COVID event, while also maintaining the quality of regulatory capital.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

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[9] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-03-23/html/2020-06156.htm.
[10] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-03-31/html/2020-06755.htm.
[11] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-03-31/html/2020-06770.htm.

Effective April 14, 2020. On April 1, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1707) to revise, on a temporary basis for bank holding companies (BHCs), savings and loan holding companies (SLHCs), and U.S. intermediate holding companies (IHCs) of foreign banking organizations, the calculation of total leverage exposure, the denominator of the SLR.[12] Under the interim final rule, BHCs, SLHCs, and IHCs may choose to exclude U.S. Treasury securities and deposits at Federal Reserve Banks from the SLR calculation through the first quarter of 2021.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective April 23, 2020. On April 3, 2020, the Board approved two interim final rules and requests for comment (Docket Nos. R-1710 and R-1711), issued jointly with the FDIC and OCC, to implement the provision of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) that required the agencies to reduce the community bank leverage ratio (CBLR) temporarily to 8 percent.[13] Under one of the interim final rules, a qualifying banking organization with a leverage ratio of 8 percent or greater could elect to use the CBLR framework as of the second quarter of 2020 and continuing for the remainder of the year. In addition, the other interim final rule establishes a graduated transition from the temporary 8 percent CBLR back to a 9 percent or greater CBLR by January 1, 2022.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective April 13, 2020. On April 8, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1712), issued jointly with the FDIC and OCC, to facilitate lending under the Board's Paycheck Protection Program Liquidity Facility (PPPLF).[14] The Board had established the PPPLF to provide liquidity to small business lenders and the broader credit markets, help stabilize the financial system, and provide economic relief to small businesses. The interim final rule allows banking organizations to neutralize the regulatory capital effects of participating in the PPPLF. In addition, as mandated by the CARES Act, the interim final rule states that loans originated under the SBA's PPP receive a 0 percent risk weight under the agencies' regulatory capital rules.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

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[12] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-04-14/html/2020-07345.htm.

[13] See *Federal Register* notices at https://www.govinfo.gov/content/pkg/FR-2020-04-23/html/2020-07449.htm and https://www.govinfo.gov/content/pkg/FR-2020-04-23/html/2020-07448.htm.

[14] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-04-13/html/2020-07712.htm.

Effective January 1, 2021. On August 25, 2020, the Board approved a final rule (Docket No. R-1703), issued jointly with the FDIC and OCC, to adopt, without change, the interim final rule approved on March 17, 2020, revising the definition of "eligible retained income" for all banking organizations subject to the agencies' capital rules.[15]

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Voting against this action:** Governor Brainard.

Effective September 30, 2020. On August 25, 2020, the Board approved a final rule (Docket No. R-1708), issued jointly with the FDIC and OCC, to delay the estimated impact on regulatory capital of the implementation of the CECL accounting standard.[16] The final rule is consistent with the interim final rule approved on March 27, 2020, but makes certain clarifications and minor adjustments related to the mechanics of the transition and the eligibility criteria for applying the transition.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective November 9, 2020. On August 25, 2020, the Board approved a final rule (Docket No. R-1711), issued jointly with the FDIC and OCC, to adopt, without change, the two interim final rules on the CBLR approved on April 3, 2020.[17]

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective December 28, 2020. On September 24, 2020, the Board approved a final rule (Docket Nos. R-1705 and R-1712), issued jointly with the FDIC and OCC, to adopt, without change, the interim final rules approved on March 19 and April 8, 2020.[18] Under the final rule, banking organizations may continue to neutralize the regulatory capital effects of participating in the MMLF and the PPPLF.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

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[15] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-10-08/html/2020-19829.htm.
[16] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-09-30/html/2020-19782.htm.
[17] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-10-09/html/2020-19922.htm.
[18] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-10-28/html/2020-21894.htm.

Regulations Q (Capital Adequacy of Bank Holding Companies, Savings and Loan Holding Companies, and State Member Banks) and YY (Enhanced Prudential Standards)

Effective April 1, 2021. On October 19, 2020, the Board approved a final rule (Docket No. R-1655), issued jointly with the FDIC and OCC, that applies to the largest banking organizations in order to reduce interconnectedness within the financial system and systemic risks.[19] U.S. global systemically important bank holding companies (G-SIBs) and U.S. intermediate holding companies of foreign G-SIBs are required to issue debt with certain features under the Board's total loss-absorbing capacity (TLAC) rule. To discourage the largest banking organizations from purchasing TLAC debt, the final rule prescribes a more stringent regulatory capital treatment for holdings of TLAC debt. In addition, the final rule makes clarifying changes to the TLAC requirements.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Regulations Q (Capital Adequacy of Bank Holding Companies, Savings and Loan Holding Companies, and State Member Banks), Y (Bank Holding Companies and Change in Bank Control), and YY (Enhanced Prudential Standards)

Effective May 18, 2020. On February 28, 2020, the Board approved a final rule (Docket No. R-1603) to simplify the regulatory capital framework by integrating the capital rule's non-stress capital requirements and the Board's Comprehensive Capital Analysis and Review (CCAR) through the establishment of a stress capital buffer (SCB) requirement, beginning with CCAR 2020.[20] Under the final rule, the Board uses the results of its supervisory stress test to establish the size of the SCB component of a firm's capital conservation buffer requirement. A firm that does not maintain capital ratios above its minimums plus its buffer requirements faces restrictions on its capital distributions and discretionary bonus payments. The final rule applies to BHCs and IHCs of foreign banking organizations that have $100 billion or more in total consolidated assets.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Voting against this action:** Governor Brainard.

Regulation Y (Bank Holding Companies and Change in Bank Control)

Effective April 17 through December 31, 2020. On April 10, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1713), issued jointly with the FDIC and OCC, to temporarily amend the agencies' appraisal regulations to allow the deferral of required real estate-related appraisals and evaluations for up to 120 days after the closing of certain residential or commercial real estate transactions, not including real estate acquisition, development, and con-

[19] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2021-01-06/html/2020-27046.htm.
[20] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-03-18/html/2020-04838.htm.

struction transactions.[21] The interim final rule helps banking institutions to expeditiously extend liquidity to households and businesses in light of the strains on the economy due to the COVID event.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective October 16 through December 31, 2020. On September 24, 2020, the Board approved a final rule (Docket No. R-1713), issued jointly with the FDIC and OCC, to temporarily amend the agencies' appraisal regulations by deferring appraisal and evaluation requirements for certain real estate-related transactions.[22] The final rule is substantially similar to the interim final rule approved on April 10, 2020, but clarifies the meaning of "transactions for the acquisition, development, and construction of real estate" by adopting the definition for "construction, land development, and other land loans" from the existing FFIEC Call Report instructions.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Regulations Y (Bank Holding Companies and Change in Bank Control) and LL (Savings and Loan Holding Companies)

Effective April 1, 2020. On January 30, 2020, the Board approved a final rule (Docket No. R-1662) to standardize and increase the transparency of the Board's control rules for BHCs and SLHCs.[23] Under U.S. banking law, if a company has control over a bank or savings association ("a bank"), it is generally subject to Federal Reserve regulation and supervision. Historically, the Board has decided many questions of control on a case-by-case basis. The final rule establishes a comprehensive public framework that outlines combinations of factors and thresholds that trigger presumptions of control. Under the new framework, key control factors to be considered include a company's equity investment in a bank, the director and employee overlaps between a company and a bank, and the scope of business relationships between a company and a bank.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective September 30, 2020. On March 31, 2020, the Board approved a final rule (Docket No. R-1662) to delay by six months the effective date for its revised control framework, in light of dislocations in the U.S. economy from the COVID event.[24]

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[21] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-04-17/html/2020-08216.htm.
[22] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-10-16/html/2020-21563.htm.
[23] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-03-02/html/2020-03398.htm.
[24] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-04-02/html/2020-06993.htm.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Regulation KK (Swaps Margin and Swaps Push-Out)

Final rule effective August 31, 2020; interim final rule effective September 1, 2020. On June 24, 2020, the Board approved a final rule (Docket No. R-1682) and an interim final rule and request for comment (Docket No. R-1721), both issued jointly with the FDIC, OCC, Farm Credit Administration, and Federal Housing Finance Agency.[25] The final rule amends the swap margin requirements of the agencies' swap margin rules by allowing certain amendments to legacy swaps, providing exemptions for many inter-affiliate swaps from initial margin requirements, and clarifying the timing for documentation requirements.[26] The interim final rule delays the implementation of initial margin requirements for the final two phases of the swap margin rule as a result of the COVID event.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Voting against this action:** Governor Brainard.

Regulation TT (Supervision and Regulation Assessments of Fees)

Effective January 7, 2021. On November 12, 2020, the Board approved a final rule (Docket No. R-1683) to modify the annual assessment fees for its supervision and regulation of large financial companies, as required by EGRRCPA.[27] The final rule raises the minimum threshold for being considered an assessed company from $50 billion to $100 billion in total consolidated assets for BHCs and SLHCs and adjusts the amount charged to assessed companies with total consolidated assets between $100 billion and $250 billion to reflect changes in supervisory and regulatory responsibilities resulting from EGRRCPA.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Regulation VV (Proprietary Trading and Relationships with Covered Funds)

Effective October 1, 2020. On June 25, 2020, the Board approved a final rule (Docket No. R-1694), issued jointly with the FDIC, OCC, Commodity Futures Trading Commission, and Securities and Exchange Commission, amending the agencies' regulations implementing section 13 of

[25] See *Federal Register* notices at https://www.govinfo.gov/content/pkg/FR-2020-07-01/html/2020-14097.htm and https://www.govinfo.gov/content/pkg/FR-2020-07-01/html/2020-14094.htm.

[26] For Regulation KK, the agencies are the Board, FDIC, OCC, Farm Credit Administration, and Federal Housing Finance Agency.

[27] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-12-08/html/2020-25623.htm.

the Bank Holding Company Act (commonly known as the Volcker rule).[28] The final rule modified certain provisions of the agencies' regulations related to hedge funds and private equity funds to simplify and clarify compliance with the rule, reduce the extraterritorial application of the requirements, and permit certain fund-related investments and activities—including payment, clearing, and settlement activities—that do not present the risks that the Volcker rule was intended to address.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Voting against this action:** Governor Brainard.

Regulation WW (Liquidity Risk Measurement Standards)

Effective May 6, 2020. On April 30, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1717), issued jointly with the FDIC and OCC, to amend the liquidity coverage ratio (LCR) rule to facilitate banking organizations' participation in the PPPLF and the MMLF.[29] The interim final rule facilitates participation in the PPPLF and MMLF by requiring banking organizations to neutralize the LCR impact associated with the non-recourse funding provided by these facilities, thereby ensuring that the effects of the use of these facilities are consistent and predictable under the LCR rule.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective December 28, 2020. On September 24, 2020, the Board approved a final rule (Docket No. R-1717), issued jointly with the FDIC and OCC, to adopt as final the amendments to the LCR rule made under an interim final rule approved on April 30, 2020.[30] Under the final rule, banking organizations are required to continue to neutralize the LCR effects of participating in the MMLF and PPPLF.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective July 1, 2021. On October 20, 2020, the Board approved a final rule (Docket No. R-1537), issued jointly with the FDIC and OCC, to implement a minimum Net Stable Funding Ratio (NSFR) requirement for certain large banking organizations.[31] Under the final rule, large banking organizations are required to maintain a minimum amount of stable funding to support

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[28] For Regulation VV, the agencies are the Board, FDIC, OCC, Commodity Futures Trading Commission, and Securities and Exchange Commission. See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-07-31/html/2020-15525.htm.

[29] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-05-06/html/2020-09716.htm.

[30] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-10-28/html/2020-21894.htm.

[31] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2021-02-11/html/2020-26546.htm.

their assets, commitments, and derivative exposures over a one-year time horizon. The NSFR is designed to reduce the likelihood that disruptions to a banking organization's regular sources of funding would compromise its liquidity position, promote effective liquidity risk management, and support the ability of banking organizations to lend to businesses and households across a range of market conditions.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Voting against this action:** Governor Brainard.

Regulation YY (Enhanced Prudential Standards)

Effective March 26, 2020. On March 21, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1706) to revise the definition of "eligible retained income" for purposes of the Board's TLAC rule, in light of disruptions in economic conditions and strains in U.S. financial markets caused by the COVID event.[32] The revised definition of eligible retained income will make any automatic limitations on capital distributions that could apply under the TLAC rule more gradual.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Abstaining:** Governor Brainard.

Effective May 28, 2020. On April 30, 2020, the Board approved a final rule (Docket No. R-1534) to extend by 18 months the initial compliance dates for certain requirements in the Board's single-counterparty credit limit (SCCL) rule applicable to the combined U.S. operations of foreign banks.[33] The SCCL rule allows a foreign banking organization to comply with the counterparty limits applicable to its combined U.S. operations by certifying to the Board that it meets SCCL standards established by its home-country supervisor that are consistent with the large-exposures framework published by the Basel Committee on Banking Supervision. The final rule provides additional time for foreign jurisdictions' implementation of their SCCL standards to become effective.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective January 1, 2021. On August 25, 2020, the Board approved a final rule (Docket No. R-1706) to adopt, without change, the interim final rule approved on March 21, 2020, revising the definition of "eligible retained income" for purposes of the Board's TLAC rule.[34]

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[32] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-03-26/html/2020-06371.htm.
[33] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-05-28/html/2020-09665.htm.
[34] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-10-08/html/2020-19829.htm.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Voting against this action:** Governor Brainard.

Temporary Regulatory Relief for Community Banking Organizations

Effective December 2, 2020. On November 16, 2020, the Board approved an interim final rule and request for comment (Docket No. R-1731), issued jointly with the FDIC and OCC, to provide certain community banking organizations with temporary relief from various requirements in Regulations H, K, L, Q, Y, II, and LL.[35] Due to their participation in federal coronavirus response programs (such as the PPP) and other lending to support the U.S. economy, many community banking organizations have experienced rapid and unexpected increases in their sizes, which could subject them to new regulations or reporting requirements. The interim final rule allows national banks, savings associations, state banks, BHCs, SLHCs, and U.S. branches and agencies of foreign banking organizations with under $10 billion in total assets as of December 31, 2019, to use asset data as of that date to determine the applicability of various regulatory asset thresholds during calendar years 2020 and 2021.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Rules Regarding Availability of Information

Effective October 15, 2020. On July 10, 2020, the Board approved a final rule (Docket No. R-1665) to make technical, clarifying updates to its Freedom of Information Act (FOIA) procedures and changes to its rules for the disclosure of confidential supervisory information (CSI), which is supervisory information belonging to the Board that may include proprietary financial institution-specific information.[36] The final rule updates the definitions for expedited processing and the different categories of FOIA requesters and amends or clarifies other information to help users more easily navigate the process of filing a FOIA request. While the final rule does not expand or reduce the information that falls within the current definition of CSI, it updates certain outdated and inefficient restrictions governing the disclosure of CSI, for example, by allowing supervised financial institutions to share CSI with all affiliates, rather than only with their parent bank holding companies. In addition, the final rule allows financial institutions to share CSI with service providers without obtaining Reserve Bank approval.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

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[35] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-12-02/html/2020-26138.htm.
[36] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-09-15/html/2020-18806.htm.

Policy Statements and Other Actions

Determination on Investments in "Elevated Poverty Areas" as Public Welfare Investments

On February 21, 2020, the Board determined that certain investments made by a state member bank in an elevated poverty area where the poverty rate is 20 percent or higher, if the area is considered a low- or moderate-income (LMI) area and the investments are targeted toward LMI persons or small businesses, are investments "designed primarily to promote the public welfare," within the meaning of section 9(23) of the Federal Reserve Act and section 208.22 of the Board's Regulation H, provided all other statutory and regulatory criteria are met.[37]

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Appeals of Material Supervisory Determinations and Role of the Ombudsman

Effective April 1, 2020. On March 2, 2020, the Board approved a final policy statement (Docket No. OP-1696) on appeals of material supervisory determinations and the functions of the Ombudsman for the Federal Reserve System.[38] The final policy improves and expedites the internal appeals process for institutions, particularly institutions in troubled condition, wishing to appeal an adverse material supervisory determination. The final policy also formalizes many of the current practices of the Ombudsman, including the receipt of supervisory-related complaints and material supervisory determination appeals, and clarifies certain aspects of the Ombudsman's role.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Credit Losses and Credit Risk Review Systems

On March 13, 2020, the Board approved a final Interagency Policy Statement on Allowances for Credit Losses (Docket No. OP-1680) and final Interagency Guidance on Credit Risk Review Systems (Docket No. OP-1679).[39] The policy statement and the interagency guidance were issued jointly with the FDIC, OCC, and National Credit Union Administration. The policy statement promotes consistency in the interpretation and application of the Financial Accounting Standards Board's credit losses accounting standard, which introduces the CECL methodology. The policy statement describes the measurement of expected credit losses using the CECL methodology and

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[37] See CA letter 20-9 at https://www.federalreserve.gov/supervisionreg/caletters/CA%2020-9%20Poverty%20Measures%20and%20Public%20Welfare%20Investments%20(051220).pdf.

[38] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-03-17/html/2020-05491.htm.

[39] See *Federal Register* notices at https://www.govinfo.gov/content/pkg/FR-2020-06-01/html/2020-10291.htm and https://www.govinfo.gov/content/pkg/FR-2020-06-01/html/2020-10292.htm.

updates concepts and practices detailed in existing supervisory guidance that remain applicable. The interagency guidance presents principles for establishing a system of independent, ongoing credit risk reviews in accordance with safety and soundness standards.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Section 23A of the Federal Reserve Act and Regulation W (Transactions between Member Banks and Their Affiliates)

On March 17, 2020, the Board approved a policy to temporarily provide exemptions from the requirements of section 23A of the Federal Reserve Act and the Board's Regulation W, in light of significant volatility in financial markets as a result of the COVID event.[40] The temporary policy permitted certain banks to purchase certain assets from their affiliated money market mutual funds, subject to conditions and limitations, to enable the funds to meet their contractual obligations and avoid further market stress. The exemptions issued pursuant to the policy expired six months from the date of issuance.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

On March 18, 2020, the Board approved a policy to temporarily provide exemptions from the requirements of section 23A of the Federal Reserve Act and the Board's Regulation W, in light of the COVID event.[41] The temporary policy permitted certain banks to purchase certain assets from their affiliated broker-dealers, subject to conditions and limitations, to help stabilize short-term bank and corporate funding markets. The exemptions issued pursuant to the policy expired one week from the date of issuance.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Policy on Payment System Risk

On March 23, 2020, the Board approved a notice (Docket No. OP-1589) to delay, from April 1 to October 1, 2020, the implementation of changes to its Policy on Payment System Risk (PSR policy) related to procedures for determining the net debit cap and maximum daylight overdraft capacity of a U.S. branch or agency of a foreign banking organization.[42] This additional time

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[40] See the template letter at https://www.federalreserve.gov/supervisionreg/legalinterpretations/fedreserseactint20200317.pdf.

[41] See the template letter at https://www.federalreserve.gov/supervisionreg/legalinterpretations/fedreserseactint20200318.pdf.

[42] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-04-06/html/2020-06482.htm.

allowed foreign banking organizations and the Federal Reserve Banks to focus on heightened priorities, in light of the challenges posed by the COVID event.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective April 24 through September 30, 2020. On April 23, 2020, the Board approved a policy statement (Docket No. OP-1716) temporarily adjusting the manner in which the Reserve Banks administer Part II of the PSR policy to encourage banking institutions to use intraday credit extended by Reserve Banks, on both a collateralized and uncollateralized basis, to support the provision of liquidity to households and businesses and the general smooth functioning of payment systems.[43] The PSR policy provides access to intraday credit to healthy institutions, subject to net debit caps and fees for uncollateralized overdrafts. The Board temporarily lifted net debit caps and fees for these institutions due to the extraordinary disruptions from the COVID event. The Board also temporarily adopted a streamlined process to allow secondary credit institutions to request collateralized capacity from their Reserve Banks.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

On September 24, 2020, the Board approved a notice (Docket No. OP-1692) to amend the previously announced implementation date of (1) modifications to Federal Reserve Bank (Reserve Bank) wholesale payment services and (2) corresponding changes to the PSR policy, from March 19 to March 8, 2021, except for two changes to the PSR policy that will still be implemented on March 19, 2021.[44] This earlier implementation date will permit the Reserve Banks to test and implement modifications to the Fedwire® Funds Service and the National Settlement Service before March 19, 2021 (NACHA's current effective date for implementing the later same-day ACH window).

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Effective September 30, 2020, to March 31, 2021. On September 30, 2020, the Board approved an extension of the temporary actions approved on April 23, 2020, to encourage healthy depository institutions to utilize intraday credit extended by Federal Reserve Banks (Docket No. OP-1716).[45] The temporary actions were previously scheduled to expire on September 30, 2020.

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[43] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-04-28/html/2020-09052.htm.
[44] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-09-30/html/2020-21532.htm.
[45] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-10-06/html/2020-22005.htm.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Resolution Plans

On May 5, 2020, in light of challenges arising from the COVID event, the Board approved an extension of two resolution plan deadlines: (1) to September 29, 2020, for the resolution plans of four firms (Barclays, Credit Suisse, Deutsche Bank, and UBS) that were required to remediate certain previously identified shortcomings and (2) to September 29, 2021, for the targeted resolution plans from large foreign and domestic banks in categories II and III of the large bank regulatory framework.[46] The determination to extend the two deadlines was made jointly with the FDIC.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

On June 29, 2020, the Board approved (1) scope letters to the eight largest and most complex domestic banking organizations to guide their next resolution plans, which are due by July 1, 2021, and (2) letters to certain firms whose failure or discontinuance would threaten U.S. financial stability to inform the firms of the results of a review of their "critical operations."[47] All the letters were issued jointly with the FDIC.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

On December 8, 2020, the Board approved final guidance (Docket No. OP-1699), issued jointly with the FDIC, for the 2021 and subsequent resolution plan submissions by certain foreign banks.[48] In the guidance, the Board and FDIC provided their tailored expectations for an orderly resolution under the U.S. Bankruptcy Code. The scope of the guidance was also modified to generally cover foreign banks in category II of the large bank regulatory framework. In addition, the Board and FDIC jointly approved targeted-scope letters to foreign banks in categories II and III of the large bank regulatory framework and extended the submission date for these firms' resolution plans to December 17, 2021.[49] The targeted-scope letters identify areas of interest that are required to be addressed in the firms' 2021 targeted resolution plans. In particular, these targeted plans will be required to include core elements of a firm's resolution strategy as well as how each firm has integrated changes to, and lessons learned from, its response to the COVID event into its resolution planning process. The Board and FDIC also jointly concluded that the previously

[46] See press release at https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200506a.htm.
[47] See press release at https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200701a.htm.
[48] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-12-22/html/2020-28155.htm.
[49] See press release at https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201209a.htm.

identified shortcomings in the resolution plans of Barclays, Credit Suisse, Deutsche Bank, and UBS had been remediated.

Voting for the final guidance: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Voting against the final guidance:** Governor Brainard.

Voting for the other resolution plan actions: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Capital Planning and Stress Testing

On June 18, 2020, the Board approved actions to ensure large banks remained well capitalized, given economic disruptions caused by the COVID event.[50] As a result of changes in financial markets or the macroeconomic outlook that could have a material impact on the risk profile and financial condition of each of the 33 banking organizations participating in the 2020 stress test cycle, the Board required the firms to resubmit their capital plans within 45 days of receiving updated scenarios from the Board.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Under the Board's rules, a firm may not make a capital distribution following an event requiring resubmission unless it receives prior approval from the Board. Therefore, on the same day, the Board authorized firms, for the third quarter of 2020, to make certain dividend payments according to a cap and a formula based on their recent income. The Board did not authorize firms to make share repurchases.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Voting against this action:** Governor Brainard.

On June 24, 2020, the Board approved (1) publicly disclosing summary results of the additional sensitivity analyses conducted in light of coronavirus-related events that had significantly and adversely impacted global financial markets and (2) notifying each firm participating in the 2020 stress test cycle of its SCB requirement, effective for the fourth quarter of 2020.[51] The additional sensitivity analyses assessed the resiliency of large banks under three hypothetical downside scenarios: a V-shaped recession and recovery; a slower, U-shaped recession and recovery; and a W-shaped, double-dip recession.

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[50] See press release at https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200625c.htm.
[51] See press release at https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200625c.htm.

Voting for these actions: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

On September 30, 2020, the Board approved extending the third-quarter limits on capital distributions, with minor modifications, through the fourth quarter of 2020.[52]

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Voting against this action:** Governor Brainard.

On December 17, 2020, the Board approved extending the fourth-quarter limits on capital distributions, with certain modifications, through the first quarter of 2021.[53] For the first quarter of 2021, the Board limited the firms' dividend payments and share repurchases to an amount based on a firm's income over the past year.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governor Bowman. **Voting against this action:** Governor Brainard.

On the same day, the Board also approved an extension of the time period for notifying each firm whether its SCB would be recalculated, from January 15 to March 31, 2021.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Instant Payments

On August 5, 2020, the Board approved a service announcement (Docket No. OP-1670) outlining the features and functionality of the FedNow Service, a new interbank round-the-clock, real-time gross payment and settlement service.[54] The FedNow Service, alongside similar services provided by the private sector, will support banks' provision of end-to-end instant payment services and will provide infrastructure to promote ubiquitous, safe, and efficient instant payments in the United States. Work related to the implementation of the FedNow Service is ongoing, and the target launch date is estimated for 2023.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

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[52] See press release at https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200930b.htm.
[53] See press release at https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201218b.htm.
[54] See *Federal Register* notice at https://www.govinfo.gov/content/pkg/FR-2020-08-11/html/2020-17539.htm.

Countercyclical Capital Buffer

On December 18, 2020, the Board approved affirmation of the Countercyclical Capital Buffer (CCyB) at the current level of 0 percent.[55] In making this determination, the Board followed the framework detailed in the Board's policy statement for setting the CCyB.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

Interest on Reserves

On January 29, 2020, the Board approved raising the interest rate paid on required and excess reserve balances from 1.55 percent to 1.60 percent, effective January 30, 2020.[56] This action was taken to support the FOMC's decision on January 29 to maintain the federal funds rate in a target range of 1½ to 1¾ percent. Setting the interest rate paid on required and excess reserve balances 10 basis points above the bottom of the target range for the federal funds rate was intended to foster trading in the federal funds market at rates well within the FOMC's target range.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

On March 3, 2020, the Board approved lowering the interest rate paid on required and excess reserve balances from 1.60 percent to 1.10 percent, effective March 4, 2020.[57] This action was taken to support the FOMC's decision on March 3 to lower the target range for the federal funds rate by 50 basis points, to a range of 1 percent to 1¼ percent.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

On March 15, 2020, the Board approved lowering the interest rate paid on required and excess reserve balances from 1.10 percent to 0.10 percent, effective March 16, 2020.[58] This action was taken to support the FOMC's decision on March 15 to lower the target range for the federal funds rate to 0 to ¼ percent.

Voting for this action: Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

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[55] See press release at https://www.federalreserve.gov/newsevents/pressreleases/bcreg20201218c.htm.
[56] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200129a1.htm.
[57] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200303a1.htm.
[58] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315a1.htm.

Special Facilities

Against the background of continued disruptions in economic conditions following the COVID event, the Board in 2020 established special facilities to support the flow of credit to households, businesses, and state and local governments. The facilities were established pursuant to section 13(3) of the Federal Reserve Act, under which the Board may, in unusual and exigent circumstances and with the prior approval of the Secretary of the Treasury, authorize a Federal Reserve Bank to extend credit to any participant in a program or facility with broad-based eligibility. The Board's section 13(3) lending authority is subject to limitations, including a prohibition on lending to entities that are insolvent and a requirement that the relevant Federal Reserve Bank be secured to its satisfaction in connection with emergency loans.[59] Unless otherwise indicated, the Federal Reserve Bank of New York administers the 2020 facilities. The Secretary of the Treasury approved the establishment of, and amendments to, all of the facilities, and all actions to establish or amend the facilities were approved by the unanimous vote of Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman. The December 28, 2020, action on the Main Street Lending Program was approved by these five Board members and Governor Waller.[60]

Commercial Paper Funding Facility

On March 17, 2020, the Board approved the establishment of the Commercial Paper Funding Facility (CPFF) to ensure the smooth functioning of the commercial paper market by providing a liquidity backstop to U.S. issuers of commercial paper, including municipalities, through the purchase of three-month unsecured and asset-backed commercial paper directly from eligible issuers.[61] The U.S. Department of the Treasury invested $10 billion of equity in the CPFF from the Treasury's Exchange Stabilization Fund (ESF).

On March 20 and 22, 2020, the Board approved expanding the terms of the instruments purchased by the CPFF and a reduction in the pricing of the facility.[62]

On July 22, 2020, the Board approved expanding the eligible counterparties for the CPFF.[63]

On November 28, 2020, the Board approved an extension of the CPFF until March 31, 2021.[64]

[59] See 12 U.S.C. § 343(3); 12 C.F.R. § 201.4(d).
[60] Governor Waller was sworn in as a member of the Board on December 18, 2020.
[61] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200317a.htm.
[62] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm.
[63] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200723a.htm.
[64] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20201130a.htm.

Main Street Lending Program

The Board established the Main Street Lending Program to support lending to small and medium-sized for-profit businesses and nonprofit organizations that were in sound financial condition before the COVID event. The program, which terminated on January 8, 2021, operated through the following five facilities:

- Main Street New Loan Facility (MSNLF)
- Main Street Expanded Loan Facility (MSELF)
- Main Street Priority Loan Facility (MSPLF)
- Nonprofit Organization New Loan Facility (NONLF)
- Nonprofit Organization Expanded Loan Facility (NOELF)

On April 8, 2020, the Board approved the establishment of the MSNLF and MSELF to support the flow of credit to small and medium-sized businesses by offering four-year loans to companies employing up to 10,000 workers or with 2019 annual revenues of up to $2.5 billion.[65] Under the term sheets, principal and interest payments on the loans were deferred for one year, and eligible lenders were permitted to originate new Main Street loans or use Main Street loans to increase the size of existing loans to eligible businesses. A special-purpose vehicle (SPV) was established by the Federal Reserve Bank of Boston (the Boston Reserve Bank) to purchase 95 percent of eligible loans from eligible lenders, with lenders retaining a 5 percent share. Borrowers also were required to follow compensation, stock repurchase, and dividend restrictions that applied to direct loan programs under the CARES Act. Firms participating in the SBA's PPP were also permitted to take out Main Street loans. The Treasury, using CARES Act funding, committed to invest $75 billion of equity in the SPV established for the Main Street facilities.

On April 30, 2020, the Board approved an expansion of the MSNLF and MSELF and the establishment of the MSPLF, which provided for increased risk sharing by lenders.[66] After the announcement of the MSNLF and MSELF on April 8, the Board requested public feedback on potential refinements to the Main Street Lending Program. Based on this feedback, the Board (1) lowered the minimum loan size for certain loans to $500,000 and (2) expanded the pool of eligible businesses for all Main Street loans to businesses with up to 15,000 employees or up to $5 billion in 2019 annual revenues. Under the new MSPLF term sheet, lenders would have retained a 15 percent share on loans that, when added to a borrower's existing debt, did not exceed six times the borrower's earnings, after appropriate adjustments for interest payments, taxes, and depreciation and other matters. The Boston Reserve Bank SPV would have purchased 85 percent of eligible MSPLF loans from eligible lenders.

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[65] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm. The Board had earlier announced plans to establish a Main Street Lending Program (see press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm).

[66] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200430a.htm.

On June 8, 2020, the Board approved expanding the MSNLF, MSELF, and MSPLF to allow more small and medium-sized businesses to receive support.[67] The changes included lowering the minimum loan size for certain loans to $250,000 from $500,000; increasing the maximum loan size for all three facilities; increasing the term of each loan option from four years to five years; and extending the repayment period for all loans by delaying principal payments until the end of the third year, rather than the end of the second year. Under these terms, the Boston Reserve Bank SPV purchased 95 percent of eligible MSPLF loans from eligible lenders, and lenders retained 5 percent of each loan. The Board also announced plans to develop a Main Street loan program for nonprofit organizations.

On July 13, 2020, the Board approved the establishment of the NONLF and NOELF to provide greater access to credit for nonprofit organizations, such as educational institutions, hospitals, and social services organizations, that were in sound financial condition before the pandemic.[68] Organizations participating in the NONLF or NOELF were required to be tax-exempt nonprofit organizations described in section 501(c)(3) or 501(c)(19) of the Internal Revenue Code. On June 15, the Board had requested public comment on proposals for nonprofit lending facilities and considered public feedback when establishing the terms of the two new facilities.[69] Specifically, the minimum employment threshold for nonprofits was lowered from 50 employees to 10, the limit on donation-based funding was eased, and several financial eligibility criteria were adjusted to accommodate a wider range of nonprofit operating models. The Main Street nonprofit loan terms generally mirrored those of Main Street for-profit business loans, including the interest rate, principal and interest payment deferral, five-year term, and minimum and maximum loan sizes. The Boston Reserve Bank SPV purchased 95 percent of eligible loans from eligible lenders, and lenders retained 5 percent of each loan.

On July 27, 2020, the Board approved an extension of the termination date for all five Main Street Lending Program facilities from September 30 to December 31, 2020.[70]

On October 29, 2020, the Board approved adjustments to the MSNLF, MSPLF, and NONLF to better target support to smaller businesses: (1) the minimum loan size was lowered from $250,000 to $100,000 and (2) a separate fee structure was created for loans with an initial principal amount of $100,000 to $250,000. Technical changes were also made to the term sheets for all five Main Street Lending Program facilities.[71]

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[67] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200608a.htm.
[68] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200717a.htm.
[69] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200615b.htm.
[70] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200728a.htm.
[71] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20201030a.htm.

On December 28, 2020, the Board approved an extension of the termination date for all Main Street Lending Program facilities to January 8, 2021, to allow more time to process and fund loans that were submitted to the Main Street lender portal on or before December 14, 2020.[72] The extension was consistent with section 1005 of the Consolidated Appropriations Act, 2021.

Money Market Mutual Fund Liquidity Facility

On March 18, 2020, the Board approved the establishment of the Money Market Mutual Fund Liquidity Facility (MMLF) to enhance the liquidity and functioning of crucial money markets.[73] Under the MMLF, the Boston Reserve Bank made loans available to eligible financial institutions, and the loans were secured by high-quality assets purchased by the financial institution from money market mutual funds. The Treasury provided $10 billion of credit protection to the Federal Reserve in connection with the MMLF from the Treasury's ESF.

On March 20, 2020, the Board approved enhancing the MMLF to include tax-exempt money market funds as eligible funds and to include highly rated paper issued by municipalities as eligible collateral.[74]

On March 22, 2020, the Board approved expanding the assets covered by the MMLF to include a wider range of securities, including municipal variable-rate demand notes and bank certificates of deposit.[75]

On July 27, 2020, the Board approved an extension of the termination date for the MMLF from September 30 to December 31, 2020.[76]

On November 28, 2020, the Board approved an extension of the termination date for the MMLF from December 31, 2020, to March 31, 2021.[77]

Municipal Liquidity Facility

On April 8, 2020, the Board approved the establishment of the Municipal Liquidity Facility (MLF) to provide up to $500 billion in lending to states and municipalities to help them better manage cash flow pressures and continue to serve households and businesses in their communities.[78] The MLF was authorized to purchase short-term notes directly from U.S. states, U.S. counties with a population of at least 2 million residents, and U.S. cities with a population of at least 1 million

[72] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20201229a.htm.
[73] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200318a.htm.
[74] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200320b.htm.
[75] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm.
[76] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200728a.htm.
[77] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20201130a.htm.
[78] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm.

residents. The Treasury, using CARES Act funding, committed to invest $35 billion of equity in the SPV established for the MLF.

On April 27, 2020, the Board approved the expansion of the scope and duration of the MLF.[79] The population thresholds were lowered to 500,000 for U.S. counties and 250,000 for U.S. cities. To be eligible for purchase by the MLF, short-term notes issued by eligible municipalities had to mature no later than 36 months from the date of issuance—an increase from the previously announced 24-month maximum term—and meet certain other requirements. In addition, the facility's termination date was extended to December 31, 2020.

On May 10, 2020, the Board approved amendments to the terms of the MLF to update pricing and other information.[80]

On June 3, 2020, the Board approved expanding the number and types of entities eligible to directly issue notes to the MLF to include at least two cities or counties in each state, regardless of population. Governors of each state could also designate two issuers within their jurisdictions whose revenues were generally derived from operating government activities (such as public transit, airports, toll facilities, and utilities) to be eligible to directly use the facility.[81]

On August 11, 2020, the Board approved amendments to revise the MLF's pricing methodology by reducing the interest rate spread on tax-exempt notes for each credit rating category by 50 basis points and reducing the amount by which the interest rate for taxable notes could be adjusted relative to tax-exempt notes.[82] Note: The MLF ceased purchasing eligible notes on December 31, 2020.

Paycheck Protection Program Liquidity Facility

On April 8, 2020, the Board approved the establishment of the Paycheck Protection Program Liquidity Facility (PPPLF) to supply liquidity to participating financial institutions through term financing backed by PPP loans.[83] The SBA's PPP provides loans to small businesses that are fully guaranteed by the SBA. Upon certain conditions, PPP loans can be completely forgiven so that small businesses can keep their workers on the payroll. Under the PPPLF, the Federal Reserve Banks could extend credit on a nonrecourse basis to eligible financial institutions that originated PPP loans, taking the loans as collateral at face value.

[79] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200427a.htm.
[80] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200511a.htm.
[81] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200603a.htm.
[82] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200811a.htm.
[83] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm.

On April 30, 2020, the Board approved expanding the PPPLF to provide access to additional lenders and allow eligible borrowers to pledge as collateral whole PPP loans they had purchased. PPPLF participation was open to all SBA-approved PPP lenders, including credit unions, community development financial institutions, members of the Farm Credit System, small business lending companies licensed by the SBA, and some financial technology firms.[84]

On July 27, 2020, the Board approved an extension of the termination date for the PPPLF from September 30 to December 31, 2020.[85]

On November 28, 2020, the Board approved an extension of the termination date for the PPPLF from December 31, 2020, to March 31, 2021.[86] Note: On March 4, 2021, the Board approved an extension of the termination date for the PPPLF to June 30, 2021.[87]

Primary Dealer Credit Facility

On March 17, 2020, the Board approved the establishment of the Primary Dealer Credit Facility (PDCF) to smooth market functioning and facilitate the availability of credit to businesses and households.[88] Under the PDCF, primary dealers could obtain term financing for up to 90 days in exchange for a broad range of collateral.

On July 27, 2020, the Board approved an extension of the termination date for the PDCF from September 30 to December 31, 2020.[89]

On November 28, 2020, the Board approved an extension of the PDCF from December 31, 2020, to March 31, 2021.[90]

Primary Market Corporate Credit Facility

On March 22, 2020, the Board approved the establishment of the Primary Market Corporate Credit Facility (PMCCF) to support credit to large employers through bond and loan issuances.[91] The PMCCF was open to companies that were investment grade as of March 22, 2020, and met certain other conditions. The Treasury committed to an initial investment in the PMCCF using ESF funds.

[84] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200430b.htm.
[85] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200728a.htm.
[86] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20201130a.htm.
[87] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20210308a.htm.
[88] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200317b.htm.
[89] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200728a.htm.
[90] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20201130a.htm.
[91] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm.

On April 8, 2020, the Board approved expanding the size and scope of the PMCCF.[92] The changes included an updated pricing scheme, new issuer limits, and other changes to reflect the fact that the Treasury, using CARES Act funding, committed to invest $75 billion of equity in the SPV established for both the PMCCF and the Secondary Market Corporate Credit Facility.

On June 29, 2020, the Board approved an updated term sheet for the PMCCF that added pricing and other information. Prices were issuer specific and subject to minimum and maximum spreads over comparable-maturity the Treasury securities.[93]

On July 27, 2020, the Board approved an extension of the termination date for the PMCCF from September 30 to December 31, 2020.[94] Note: The PMCCF was no longer authorized to purchase eligible assets as of December 31, 2020.

Secondary Market Corporate Credit Facility

On March 22, 2020, the Board approved the establishment of the Secondary Market Corporate Credit Facility (SMCCF) to support market liquidity through the purchase of (1) secondary-market corporate bonds issued by U.S. companies that were investment grade as of March 22, 2020, and met certain other conditions, and (2) U.S.-listed exchange-traded funds whose investment objective was to provide broad exposure to the market for U.S. corporate bonds.[95] The Treasury committed to an initial investment in the SMCCF using ESF funds.

On April 8, 2020, the Board approved expanding the size and scope of the SMCCF.[96] The changes included allowing the purchase of (1) bonds issued by companies that fell below investment grade following the announcement of the facility (so long as they remained rated at least BB-) and (2) a limited amount of certain exchange-traded funds. The changes also reflect that the Treasury, using CARES Act funding, committed to make a $75 billion equity investment in the SPV established for the SMCCF and the PMCCF.

On June 15, 2020, the Board approved updates to the SMCCF to authorize the facility to buy a broad and diversified portfolio of corporate bonds, thereby supporting market liquidity and the availability of credit for large employers.[97] The changes authorized the SMCCF to purchase individual corporate bonds to create a portfolio based on a broad, diversified market index of U.S.

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[92] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm.
[93] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200629a.htm.
[94] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200728a.htm.
[95] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm.
[96] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm.
[97] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200615a.htm.

corporate bonds that met the SMCCF's issuer rating requirements and certain other conditions. Note: On July 23, the Board announced an expansion of counterparties for the SMCCF.[98]

On July 27, 2020, the Board approved an extension of the termination date for the SMCCF from September 30 to December 31, 2020.[99] Note: The SMCCF ceased purchasing eligible assets on December 31, 2020.

Term Asset-Backed Securities Loan Facility

On March 22, 2020, the Board approved the establishment of the Term Asset-Backed Securities Loan Facility (TALF) to help meet the credit needs of consumers and small businesses by enabling the issuance of asset-backed securities (ABS) and improving the market conditions for ABS more generally.[100] The TALF facilitated the issuance of ABS backed by student loans, auto loans, credit card loans, SBA-guaranteed loans, and certain other assets. The Treasury, using the ESF, committed to make an equity investment in the SPV established for this facility.

On April 8, 2020, the Board approved changes to broaden the range of assets eligible as collateral for the TALF to include the triple-A rated tranches of both outstanding commercial mortgage-backed securities and newly issued collateralized loan obligations.[101]

On May 12, 2020, the Board approved changes to the TALF (1) to reflect that the Treasury would use CARES Act funding to make the $10 billion equity investment in the SPV established for the TALF, (2) to implement certain restrictions and limitations required by the CARES Act, and (3) to update information regarding borrower and collateral eligibility criteria.[102]

On July 22, 2020, the Board approved an expansion of eligible counterparties for the TALF.[103]

On July 27, 2020, the Board approved an extension of the termination date for the TALF from September 30 to December 31, 2020.[104] Note: The TALF ceased extending credit on December 31, 2020.

[98] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200723a.htm.
[99] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200728a.htm.
[100] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm.
[101] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm.
[102] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200512a.htm.
[103] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200723a.htm.
[104] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200728a.htm.

Discount Rates for Depository Institutions in 2020

Under the Federal Reserve Act, the boards of directors of the Federal Reserve Banks must establish rates on discount window loans to depository institutions at least every 14 days, subject to review and determination by the Board of Governors. Periodically, the Board considers proposals by the 12 Reserve Banks to establish the primary credit rate and approves proposals to maintain the formulas for computing the secondary and seasonal credit rates.

Primary, Secondary, and Seasonal Credit

Primary credit, the Federal Reserve's main lending program for depository institutions, is extended at the primary credit rate. It is made available, with minimal administration, as a source of liquidity to depository institutions that, in the judgment of the lending Federal Reserve Bank, are in generally sound financial condition. During 2020, the Board approved two decreases in the primary credit rate, bringing the rate from 2¼ percent to ¼ percent and narrowing the spread of the primary credit rate to the top of the target range for the federal funds rate from ½ percent to 0 percent.

The Board reached these determinations on the primary credit rate recommendations of the Reserve Bank boards of directors. The Board's actions were taken in conjunction with the FOMC's decisions to lower the target range for the federal funds rate by 1½ percentage points, to 0 percent to ¼ percent. Monetary policy developments are reviewed more fully in other parts of this report (see section 2, "Monetary Policy and Economic Developments").

Concurrent with the second primary credit rate decrease on March 15, 2020, the Board announced that depository institutions may borrow primary credit for periods as long as 90 days, prepayable and renewable by the borrower on a daily basis. Collectively, the changes to the offering rate and other terms of primary credit reflected broader efforts by the Federal Reserve to encourage discount window use to support the smooth flow of credit to households and businesses during the COVID event.[105]

Secondary credit is available in appropriate circumstances to depository institutions that do not qualify for primary credit. The secondary credit rate is set at a spread above the primary credit rate. Throughout 2020, the spread was set at 50 basis points. At year-end, the secondary credit rate was ¾ percent.

Seasonal credit is available to smaller depository institutions to meet liquidity needs that arise from regular swings in their loans and deposits. The rate on seasonal credit is calculated every two weeks as an average of selected money market yields, typically resulting in a rate close to the

[105] See press release at https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315b.htm.

target range for the federal funds rate. At year-end, the seasonal credit rate was 0.15 percent (see table E.1).[106]

Table E.1. Federal Reserve Bank interest rates on loans to depository institutions, December 31, 2020
Percent

Reserve Bank	Primary credit	Secondary credit	Seasonal credit
All banks	0.25	0.75	0.15

Note: Primary credit is available for very short terms as a backup source of liquidity to depository institutions that are in generally sound financial condition in the judgment of the lending Federal Reserve Bank. Secondary credit is available in appropriate circumstances to depository institutions that do not qualify for primary credit. Seasonal credit is available to help relatively small depository institutions meet regular seasonal needs for funds that arise from a clear pattern of intra-yearly movements in their deposits and loans. The discount rate on seasonal credit takes into account rates charged by market sources of funds and is reestablished on the first business day of each two-week reserve maintenance period.

Votes on Changes to Discount Rates for Depository Institutions

Details on the two actions by the Board to approve decreases in the primary credit rate are provided below.

March 3, 2020. Effective March 4, 2020, the Board approved actions taken by the boards of directors of the Federal Reserve Banks of New York and Minneapolis to decrease the primary credit rate from 2¼ percent to 1¾ percent. On March 4, 2020, the Board approved identical actions subsequently taken by the boards of directors of the Federal Reserve Banks of Boston, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Kansas City, Dallas, and San Francisco, effective immediately.

> **Voting for this action:** Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

March 15, 2020. Effective March 16, 2020, the Board approved actions taken by the boards of directors of the Federal Reserve Banks of New York and Minneapolis to decrease the primary credit rate from 1¾ percent to ¼ percent. On March 16, 2020, the Board approved identical actions subsequently taken by the boards of directors of the Federal Reserve Banks of Boston, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Kansas City, Dallas, and San Francisco, effective immediately.

> **Voting for this action:** Chair Powell, Vice Chair Clarida, Vice Chair for Supervision Quarles, and Governors Brainard and Bowman.

[106] For current and historical discount rates, see https://www.frbdiscountwindow.org/.

The Board of Governors and the Government Performance and Results Act

Overview

The Government Performance and Results Act (GPRA) of 1993 requires federal agencies to prepare a strategic plan covering a multiyear period and to submit an annual performance plan and an annual performance report. Although the Board is not covered by GPRA, the Board voluntarily complies with the spirit of the act and, like other federal agencies, publicly publishes a multiyear *Strategic Plan*, as well as an *Annual Performance Plan* and an *Annual Performance Report*.[107]

Strategic Plan, Performance Plan, and Performance Report

On December 27, 2019, the Board published the *Strategic Plan 2020–23*, which outlines the organization's priorities across five functional areas—Monetary Policy and Financial Stability, Supervision, Payment System and Reserve Bank Oversight, Public Engagement and Community Development, and Mission Enablement—for maintaining the stability, integrity, and efficiency of the nation's monetary, financial, and payments systems. In formulating the *Strategic Plan 2020–23*, the Board identified and prioritized the goals and objectives paramount to advancing the organization's mission while allowing for appropriate flexibility to respond to emerging and evolving challenges.

The *Annual Performance Plan* sets forth the projects and initiatives in support of the Board's current *Strategic Plan*'s goals and objectives during a one-year period. The *Annual Performance Plan* helps the organization identify and prioritize investments and dedicate sufficient resources across the five functions to meet its congressional mandate, while maintaining ongoing operations.

The *Annual Performance Report* summarizes the Board's accomplishments throughout the performance year that contributed toward achieving the goals and objectives identified in that year's *Annual Performance Plan*. The *Annual Performance Report* provides transparency into the organization's activities and helps the Board to communicate the continued fulfillment of its dual mandate to the U.S. Congress and the public.

Ultimately, the organization's planning and reporting processes enable the Board to identify, prioritize, and progress those activities most critical to advancing its mission.

[107] The *Strategic Plan*, *Annual Performance Plan*, and *Annual Performance Report* are available on the Federal Reserve Board's website at https://www.federalreserve.gov/publications/gpra.htm.

F | Litigation

During 2020, the Board of Governors was a party in 6 lawsuits or appeals filed that year and was a party in 7 other cases pending from previous years, for a total of 13 cases. In 2019, the Board had been a party in a total of 13 cases. As of December 31, 2020, five cases were pending.

Pending

Baylor v. Powell, No. 20-5176 (D.C. Circuit, filed June 22, 2020), is an appeal of an order granting summary judgment to the Board in an employment discrimination case.

Center for Biological Diversity v. Department of Treasury and Board of Governors, No. 20-cv-1322 (D. District of Columbia, filed May 19, 2020), is an action under the Freedom of Information Act.

Center for Popular Democracy v. Board of Governors, No. 16-cv-05829 (E.D. New York, filed October 19, 2016), is an action under the Freedom of Information Act.

Fruge v. Board of Governors, No. 20-cv-2811 (D. District of Columbia, filed October 2, 2020), is an action claiming retaliation for protected disclosures.

Junk v. Board of Governors, No. 19-3125 (2d Circuit, filed September 27, 2019), is an appeal under the Freedom of Information Act.

Resolved

Baylor v. Powell, No. 17-cv-02647 (D. District of Columbia, filed December 11, 2017), was an employment discrimination case. On April 29, 2020, the court granted the Board's motion for summary judgment.

BBX v. Board of Governors, No. 19-11172 (11th Circuit, filed March 25, 2019), was an appeal of an order granting summary judgment to the Board and the Federal Deposit Insurance Corporation in an action relating to golden-parachute payments. On April 7, 2020, the court of appeals affirmed the district court's judgment.

Board of Governors v. Allen, No. 20-ap-1041 (N.D. Mississippi bankruptcy, filed August 14, 2020), was an adversary bankruptcy proceeding regarding non-dischargeability of debt arising from a

Board enforcement proceeding. On September 16, 2020, the parties entered into a consent judgment.

Food & Water Watch v. Board of Governors, No. 20-cv-01840 (D. District of Columbia, filed July 8, 2020), was an action under the Freedom of Information Act. On September 18, 2020, the plaintiff voluntarily dismissed the case.

Gilberti v. Board of Governors, et al., No. 19-5264 (D.C. Circuit, filed November 6, 2019), was an appeal of an order dismissing the Board and various other defendants from a pro se action alleging conspiracy. On March 3, 2020, the court of appeals affirmed the dismissal.

Goldstein v. Board of Governors, No. 20-cv-84 (D. District of Columbia, filed January 13, 2020), was an action under the Freedom of Information Act. On February 18, 2020, the plaintiff voluntarily dismissed the case.

Morley v. Board of Governors, No. 19-cv-00797 (D. District of Columbia, filed March 21, 2019), was an action under the Freedom of Information Act. On July 27, 2020, the parties filed a joint stipulation of dismissal.

Richardson v. Powell, No. 19-5119 (D.C. Circuit, filed April 22, 2019), was an appeal of an order granting summary judgment to the Board in an employment discrimination case. On February 27, 2020, the court of appeals affirmed the judgment.

G | Statistical Tables

This appendix includes 13 statistical tables that provide updated historical data concerning Board and System operations and activities.

Table G.1. Federal Reserve open market transactions, 2020
Millions of dollars

Type of security and transaction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
U.S. Treasury securities[1]													
Outright transactions[2]													
Treasury bills													
Gross purchases	70,510	55,508	30,501	0	0	0	0	0	0	0	0	0	156,519
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchanges	20,631	23,972	36,002	71,566	75,388	71,474	96,395	74,346	69,755	88,347	80,456	98,073	806,405
For new bills	20,631	23,972	36,002	71,566	75,388	71,474	96,395	74,346	69,755	88,347	80,456	98,073	806,405
Redemptions	0	0	0	0	0	0	0	0	0	0	0	0	0
Others up to 1 year													
Gross purchases	2,101	2,189	105,183	89,473	27,968	14,131	14,984	12,752	6,764	6,477	5,602	4,883	292,507
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchanges	-17,675	-37,357	-33,959	-14,078	-50,769	-39,445	-30,520	-82,250	-30,315	-3,077	-84,588	-37,737	-461,770
Redemptions	0	0	0	0	0	0	0	0	0	0	0	0	0
Over 1 to 5 years													
Gross purchases	10,025	7,592	383,863	293,171	53,103	43,227	45,673	36,509	22,200	41,357	45,979	47,705	1,030,404
Gross sales	0	0	0	0	0	15	0	0	0	0	25	0	40
Exchanges	11,645	16,900	23,169	10,900	22,212	24,740	17,786	37,322	16,431	1,455	44,806	22,468	249,833
Over 5 to 10 years													
Gross purchases	5,020	3,285	184,985	165,619	32,639	19,626	17,529	18,717	23,642	14,887	13,259	9,105	508,313
Gross sales	0	0	0	0	0	10	0	0	0	0	0	0	10
Exchanges	5,518	12,008	10,775	3,122	16,923	10,009	9,135	26,684	9,927	979	26,299	10,595	141,974
More than 10 years													
Gross purchases	2,259	3,942	139,021	98,482	17,528	12,811	12,220	10,293	11,797	14,225	12,235	18,315	353,128
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchanges	512	8,450	15	56	11,635	4,695	3,599	18,244	3,957	643	13,483	4,674	69,963
All maturities													
Gross purchases	89,915	72,516	843,553	646,745	131,238	89,795	90,406	78,271	64,403	76,946	77,075	80,008	2,340,871
Gross sales	0	0	0	0	0	25	0	0	0	0	25	0	50
Redemptions	0	0	0	0	0	0	0	0	0	0	0	0	0
Net change in U.S. Treasury securities	89,915	72,516	843,553	646,745	131,238	89,770	90,406	78,271	64,403	76,946	77,050	80,008	2,340,821

(continued)

Table G.1. —*continued*

Type of security and transaction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Federal agency obligations													
Outright transactions[2]													
Gross purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Redemptions	0	0	0	0	0	0	0	0	0	0	0	0	0
Net change in federal agency obligations	0	0	0	0	0	0	0	0	0	0	0	0	0
Mortgage-backed securities[3]													
Net settlements[2]													
Net change in mortgage-backed securities	-21,388	-15,446	85,579	147,299	230,506	76,152	22,088	15,769	33,541	17,547	3,300	35,845	630,792
Total net change in securities holdings[4]	**68,527**	**57,070**	**929,132**	**794,044**	**361,744**	**165,922**	**112,494**	**94,040**	**97,944**	**94,493**	**80,350**	**115,853**	**2,971,613**
Temporary transactions													
Repurchase agreements[5]	206,689	159,187	307,321	189,297	173,961	128,789	7,914	0	143	1,003	1,000	1,000	n/a
Reverse repurchase agreements[5]	259,010	227,773	292,931	320,440	261,714	232,846	220,673	214,867	204,553	195,051	194,215	194,974	n/a
Foreign official and international accounts	254,996	225,463	242,447	277,609	259,615	232,433	220,652	214,839	204,443	195,039	194,077	194,367	n/a
Others	4,014	2,311	50,484	42,832	2,098	413	21	28	110	12	137	607	n/a

Note: Purchases of Treasury securities and federal agency obligations increase securities holdings; sales and redemptions of these securities decrease securities holdings. Exchanges occur when the Federal Reserve rolls the proceeds of maturing securities into newly issued securities, and so exchanges do not affect total securities holdings. Positive net settlements of mortgage-backed securities increase securities holdings, while negative net settlements of these securities decrease securities holdings. Components may not sum to totals because of rounding. See table 2 of the H.4.1 release (https://www.federalreserve.gov/releases/h41/) for the maturity distribution of the securities.

1 Transactions exclude changes in compensation for the effects of inflation on the principal of inflation-indexed securities. Transactions include the rollover of inflation compensation into new securities. The maturity distributions of exchanged Treasury securities are based on the announced maturity of new securities rather than actual day counts.

2 Excludes the effect of temporary transactions—repurchase agreements and reverse repurchase agreements.

3 Guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae. Monthly net change in the remaining principal balance of the securities, reported at face value.

4 The net change in securities holdings reflects the settlements of purchases, reinvestments, sales, and maturities of portfolio securities.

5 Averages of daily business cash value of agreements, which are collateralized by U.S. Treasury securities, federal agency debt securities, and mortgage-backed securities. For additional details on temporary transactions, see the temporary open market operations historical search available at https://apps.newyorkfed.org/markets/autorates/tomo-search-page.

n/a Not applicable.

Table G.2. Federal Reserve Bank holdings of U.S. Treasury and federal agency securities, December 31, 2018–20

Millions of dollars

Description	December 31			Change	
	2020	2019	2018	2019–20	2018–19
U.S. Treasury securities[1]					
Held outright[2]	**4,688,929**	**2,328,933**	**2,222,547**	**2,359,996**	**106,386**
By remaining maturity					
Bills					
1–90 days	191,154	51,763	–	139,391	51,763
91 days to 1 year	134,890	117,762	–	17,128	117,762
Notes and bonds					
1 year or less	708,144	303,438	384,936	404,706	(81,498)
More than 1 year through 5 years	1,759,737	893,832	958,065	865,905	(64,233)
More than 5 years through 10 years	836,893	321,591	260,898	515,302	60,693
More than 10 years	1,058,111	640,547	618,648	417,564	21,899
By type					
Bills	326,044	169,525	–	156,519	169,525
Notes	3,063,037	1,290,107	1,382,654	1,772,930	(92,547)
Bonds	1,299,848	869,301	839,893	430,547	29,408
Federal agency securities[1]					
Held outright[2]	**2,347**	**2,347**	**2,409**	**–**	**(62)**
By remaining maturity					
Discount notes					
1–90 days	–	–	–	–	–
91 days to 1 year	–	–	–	–	–
Coupons					
1 year or less	–	–	62	–	(62)
More than 1 year through 5 years	–	–	–	–	–
More than 5 years through 10 years	1,818	486	–	1,332	486
More than 10 years	529	1,861	2,347	(1,332)	(486)
By type					
Discount notes	–	–	–	–	–
Coupons	2,347	2,347	2,409	–	(62)
By issuer					
Federal Home Loan Mortgage Corporation	529	529	591	–	(62)
Federal National Mortgage Association	1,818	1,818	1,818	–	–
Federal Home Loan Banks	–	–	–	–	–

(continued)

Table G.2. —*continued*

Description	December 31			Change	
	2020	2019	2018	2019–20	2018–19
Mortgage-backed securities[3, 4]					
Held outright[2]	**2,039,467**	**1,408,677**	**1,637,123**	**630,790**	**(228,446)**
By remaining maturity					
1 year or less	4	12	4	(8)	8
More than 1 year through 5 years	2,016	1,135	214	881	921
More than 5 years through 10 years	72,044	73,528	62,706	(1,484)	10,822
More than 10 years	1,965,403	1,334,002	1,574,199	631,401	(240,197)
By issuer					
Federal Home Loan Mortgage Corporation	667,007	422,087	481,436	244,920	(59,349)
Federal National Mortgage Association	888,260	652,729	761,166	235,531	(108,437)
Government National Mortgage Association	484,200	333,861	394,521	150,339	(60,660)
Temporary transactions[5]					
Repurchase agreements[6]	**1,000**	**255,619**	**–**	**(254,619)**	**255,619**
Reverse repurchase agreements[6]	**216,051**	**336,649**	**304,012**	**(120,598)**	**32,637**
Foreign official and international accounts	206,400	272,562	262,164	(66,162)	10,398
Primary dealers and expanded counterparties	9,651	64,087	41,848	(54,436)	22,239

Note: Components may not sum to totals because of rounding.
[1] Par value.
[2] Excludes the effect of temporary transactions—repurchase agreements and reverse repurchase agreements.
[3] Guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae.
[4] The par amount shown is the remaining principal balance of the securities.
[5] Contract amount of agreements.
[6] Cash value of agreements, which are collateralized by U.S. Treasury securities, federal agency debt securities, and mortgage-backed securities.

Table G.3. Reserve requirements of depository institutions, December 31, 2020

Liability type[1]	Requirement	
	Percentage of liabilities	Effective date
Net transaction accounts	0	3/26/2020
Nonpersonal time deposits	0	12/27/1990
Eurocurrency liabilities	0	12/27/1990

Note: The table reflects the liability types and percentages of those liabilities subject to requirements for the maintenance period that contains the year end.

1 For a description of these deposit types, see Form FR 2900.

Table G.4. Banking offices and banks affiliated with bank holding companies in the United States, December 31, 2019 and 2020

Type of office	Total	Commercial banks[1]					Savings banks
		Total	Member			Nonmember	
			Total	National	State		
All banking offices							
Banks							
Number, Dec. 31, 2019	**4,753**	**4,516**	**1,508**	**777**	**731**	**3,008**	**237**
Changes during 2020							
New banks	14	12	3	3	0	9	2
Banks converted into branches	-145	-142	-45	-17	-28	-97	-3
Ceased banking operations[2]	-22	-20	-3	-1	-2	-17	-2
Other[3]	0	2	3	-5	8	-1	-2
Net change	-153	-148	-42	-20	-22	-106	-5
Number, Dec. 31, 2020	**4,600**	**4,368**	**1,466**	**757**	**709**	**2,902**	**232**
Branches and additional offices							
Number, Dec. 31, 2019	**77,937**	**75,660**	**51,209**	**39,189**	**12,020**	**24,451**	**2,277**
Changes during 2020							
New branches	983	935	582	419	163	353	48
Banks converted to branches	145	137	65	27	38	72	8
Discontinued[2]	-3,026	-3,004	-2,311	-1,937	-374	-693	-22
Other[3]	0	0	351	169	182	-351	0
Net change	-1,898	-1,932	-1,313	-1,322	9	-619	34
Number, Dec. 31, 2020	**76,039**	**73,728**	**49,896**	**37,867**	**12,029**	**23,832**	**2,311**
Banks affiliated with bank holding companies							
Number, Dec. 31, 2019	**4,026**	**3,906**	**1,369**	**689**	**680**	**2,537**	**120**
Changes during 2019							
BHC-affiliated new banks	36	33	7	4	3	26	3
Banks converted into branches	-134	-132	-43	-16	-27	-89	-2
Ceased banking operations[2]	-24	-22	-4	-1	−3	-18	-2
Other[3]	0	2	3	-5	8	-1	-2
Net change	-122	-119	-37	-18	-19	-82	-3
Number, Dec. 31, 2020	**3,904**	**3,787**	**1,332**	**671**	**661**	**2,455**	**117**

Note: Includes banks, banking offices, and bank holding companies in U.S. territories and possessions (affiliated insular areas).

1 For purposes of this table, banks are entities that are defined as banks in the Bank Holding Company Act, as amended, which is implemented by Federal Reserve Regulation Y. Generally, a bank is any institution that accepts demand deposits and is engaged in the business of making commercial loans or any institution that is defined as an insured bank in section 3(h) of the Federal Deposit Insurance Corporation Act.

2 Institutions that no longer meet the Regulation Y definition of a bank.

3 Interclass changes and sales of branches.

Table G.5A. Reserves of depository institutions, Federal Reserve Bank credit, and related items, year-end 1984–2020 and month-end 2020

Millions of dollars

Period	Factors supplying reserve funds								
	Federal Reserve Bank credit outstanding						Gold stock	Special drawing rights certificate account	Treasury currency outstanding[5]
	Securities held outright[1]	Repurchase agreements[2]	Loans and other credit extensions[3]	Float	Other Federal Reserve assets[4]	Total[4]			
1984	167,612	2,015	3,577	833	12,347	186,384	11,096	4,618	16,418
1985	186,025	5,223	3,060	988	15,302	210,598	11,090	4,718	17,075
1986	205,454	16,005	1,565	1,261	17,475	241,760	11,084	5,018	17,567
1987	226,459	4,961	3,815	811	15,837	251,883	11,078	5,018	18,177
1988	240,628	6,861	2,170	1,286	18,803	269,748	11,060	5,018	18,799
1989	233,300	2,117	481	1,093	39,631	276,622	11,059	8,518	19,628
1990	241,431	18,354	190	2,222	39,897	302,091	11,058	10,018	20,402
1991	272,531	15,898	218	731	34,567	323,945	11,059	10,018	21,014
1992	300,423	8,094	675	3,253	30,020	342,464	11,056	8,018	21,447
1993	336,654	13,212	94	909	33,035	383,904	11,053	8,018	22,095
1994	368,156	10,590	223	-716	33,634	411,887	11,051	8,018	22,994
1995	380,831	13,862	135	107	33,303	428,239	11,050	10,168	24,003
1996	393,132	21,583	85	4,296	32,896	451,992	11,048	9,718	24,966
1997	431,420	23,840	2,035	719	31,452	489,466	11,047	9,200	25,543
1998	452,478	30,376	17	1,636	36,966	521,475	11,046	9,200	26,270
1999	478,144	140,640	233	-237	35,321	654,100	11,048	6,200	28,013
2000	511,833	43,375	110	901	36,467	592,686	11,046	2,200	31,643
2001	551,685	50,250	34	-23	37,658	639,604	11,045	2,200	33,017
2002	629,416	39,500	40	418	39,083	708,457	11,043	2,200	34,597
2003	666,665	43,750	62	-319	40,847	751,005	11,043	2,200	35,468
2004	717,819	33,000	43	925	42,219	794,007	11,045	2,200	36,434
2005	744,215	46,750	72	885	39,611	831,532	11,043	2,200	36,540
2006	778,915	40,750	67	-333	39,895	859,294	11,041	2,200	38,206
2007	740,611	46,500	72,636	-19	41,799	901,528	11,041	2,200	38,681
2008	495,629	80,000	1,605,848	-1,494	43,553	2,223,537	11,041	2,200	38,674
2009	1,844,838	0	281,095	-2,097	92,811	2,216,647	11,041	5,200	42,691
2010	2,161,094	0	138,311	-1,421	110,255	2,408,240	11,041	5,200	43,542
2011	2,605,124	0	144,098	-631	152,568	2,901,159	11,041	5,200	44,198
2012	2,669,589	0	11,867	-486	218,296	2,899,266	11,041	5,200	44,751
2013	3,756,158	0	2,177	-962	246,947	4,004,320	11,041	5,200	45,493
2014	4,236,873	0	3,351	-555	239,238	4,478,908	11,041	5,200	46,301
2015	4,241,958	0	2,830	-36	221,448	4,466,199	11,041	5,200	47,567

(continued)

Table G.5A.—*continued*

Period	Factors supplying reserve funds								
	Federal Reserve Bank credit outstanding						Gold stock	Special drawing rights certificate account	Treasury currency outstanding[5]
	Securities held outright[1]	Repurchase agreements[2]	Loans and other credit extensions[3]	Float	Other Federal Reserve assets[4]	Total[4]			
2016	4,221,187	0	7,325	-804	206,551	4,434,259	11,041	5,200	48,536
2017	4,223,528	0	13,914	-920	194,288	4,430,809	11,041	5,200	49,381
2018	3,862,079	0	4,269	-770	173,324	4,038,902	11,041	5,200	49,801
2019	3,739,957	255,619	3,770	-643	156,304	4,155,007	11,041	5,200	50,138
2020	6,730,743	1,000	216,669	-567	393,420	7,341,265	11,041	5,200	50,535
2020, month-end									
Jan.	3,801,137	170,452	54	-403	159,556	4,130,796	11,041	5,200	50,176
Feb.	3,863,237	126,240	72	-396	149,949	4,139,102	11,041	5,200	50,197
Mar.	4,727,376	262,725	493,024	-654	242,177	5,724,648	11,041	5,200	50,219
Apr.	5,585,514	168,351	570,726	-958	335,293	6,658,926	11,041	5,200	50,289
May	5,955,510	182,450	616,671	-652	350,450	7,104,429	11,041	5,200	50,345
Jun.	6,124,273	57,952	442,996	-730	362,982	6,987,473	11,041	5,200	50,401
Jul.	6,231,109	0	313,615	-384	376,797	6,921,137	11,041	5,200	50,454
Aug.	6,327,578	1	289,636	-615	370,694	6,987,294	11,041	5,200	50,382
Sep.	6,430,599	1,000	223,879	-1,329	382,865	7,037,014	11,041	5,200	50,411
Oct.	6,531,692	1,000	202,492	-383	395,928	7,130,729	11,041	5,200	50,425
Nov.	6,612,639	1,000	198,157	-546	384,575	7,195,825	11,041	5,200	50,500
Dec.	6,730,743	1,000	216,669	-567	393,420	7,341,265	11,041	5,200	50,535

Note: Components may not sum to totals because of rounding.

1 Includes U.S. Treasury securities, federal agency debt securities, and mortgage-backed securities. U.S. Treasury securities and federal agency debt securities include securities lent to dealers, which are fully collateralized by U.S. Treasury securities, federal agency securities, and other highly rated debt securities.

2 Cash value of agreements, which are collateralized by U.S. Treasury securities, federal agency debt securities, and agency mortgage-backed securities.

3 From 2015–19, includes only central bank liquidity swaps; primary, seasonal, and secondary credit; and net portfolio holdings of Maiden Lane LLC. For disaggregated loans and other credit extensions from 1984–2014, refer to "Table 6B. Loans and other credit extensions, by type, year-end 1984–2014 and month-end 2014" of the 2014 Annual Report. As of 2020, includes only central bank liquidity swaps; primary, seasonal, and secondary credit; Primary Dealer Credit Facility; Money Market Mutual Fund Liquidity Facility; Paycheck Protection Program Liquidity Facility; and net portfolio holdings of Commercial Paper Funding Facility II LLC, Corporate Credit Facilities LLC, MS Facilities LLC (Main Street Lending Program), Municipal Facility LLC, and Term Asset-Backed Securities Loan Facility II LLC.

4 As of 2013, unamortized discounts on securities held outright are included as a component of Other Federal Reserve assets. Previously, they were included in Other Federal Reserve liabilities and capital.

5 Includes currency and coin (other than gold) issued directly by the U.S. Treasury. The largest components are fractional and dollar coins. For details, refer to "U.S. Currency and Coin Outstanding and in Circulation," Treasury Bulletin.

Table G.5A.—*continued*
Millions of dollars

Period	Factors absorbing reserve funds										Reserve balances with Federal Reserve Banks
	Currency in circulation	Reverse repurchase agreements[6]	Treasury cash holdings[7]	Deposits with Federal Reserve Banks, other than reserve balances					Required clearing balances[9]	Other Federal Reserve liabilities and capital[4,10]	
				Term deposits	Treasury general account	Treasury supplementary financing account	Foreign	Other[8]			
1984	183,796	0	513	n/a	5,316	n/a	253	867	1,126	5,952	20,693
1985	197,488	0	550	n/a	9,351	n/a	480	1,041	1,490	5,940	27,141
1986	211,995	0	447	n/a	7,588	n/a	287	917	1,812	6,088	46,295
1987	230,205	0	454	n/a	5,313	n/a	244	1,027	1,687	7,129	40,097
1988	247,649	0	395	n/a	8,656	n/a	347	548	1,605	7,683	37,742
1989	260,456	0	450	n/a	6,217	n/a	589	1,298	1,618	8,486	36,713
1990	286,963	0	561	n/a	8,960	n/a	369	528	1,960	8,147	36,081
1991	307,756	0	636	n/a	17,697	n/a	968	1,869	3,946	8,113	25,051
1992	334,701	0	508	n/a	7,492	n/a	206	653	5,897	7,984	25,544
1993	365,271	0	377	n/a	14,809	n/a	386	636	6,332	9,292	27,967
1994	403,843	0	335	n/a	7,161	n/a	250	1,143	4,196	11,959	25,061
1995	424,244	0	270	n/a	5,979	n/a	386	2,113	5,167	12,342	22,960
1996	450,648	0	249	n/a	7,742	n/a	167	1,178	6,601	13,829	17,310
1997	482,327	0	225	n/a	5,444	n/a	457	1,171	6,684	15,500	23,447
1998	517,484	0	85	n/a	6,086	n/a	167	1,869	6,780	16,354	19,164
1999	628,359	0	109	n/a	28,402	n/a	71	1,644	7,481	17,256	16,039
2000	593,694	0	450	n/a	5,149	n/a	216	2,478	6,332	17,962	11,295
2001	643,301	0	425	n/a	6,645	n/a	61	1,356	8,525	17,083	8,469
2002	687,518	21,091	367	n/a	4,420	n/a	136	1,266	10,534	18,977	11,988
2003	724,187	25,652	321	n/a	5,723	n/a	162	995	11,829	19,793	11,054
2004	754,877	30,783	270	n/a	5,912	n/a	80	1,285	9,963	26,378	14,137
2005	794,014	30,505	202	n/a	4,573	n/a	83	2,144	8,651	30,466	10,678
2006	820,176	29,615	252	n/a	4,708	n/a	98	972	6,842	36,231	11,847
2007	828,938	43,985	259	n/a	16,120	n/a	96	1,830	6,614	41,622	13,986
2008	889,898	88,352	259	n/a	106,123	259,325	1,365	21,221	4,387	48,921	855,599
2009	928,249	77,732	239	n/a	186,632	5,001	2,411	35,262	3,020	63,219	973,814
2010	982,750	59,703	177	0	140,773	199,964	3,337	13,631	2,374	99,602	965,712
2011	1,075,820	99,900	128	0	85,737	0	125	64,909	2,480	72,766	1,559,731
2012	1,169,159	107,188	150	0	92,720	0	6,427	27,476	n/a	66,093	1,491,044
2013	1,241,228	315,924	234	0	162,399	0	7,970	26,181	n/a	63,049	2,249,070
2014	1,342,957	509,837	201	0	223,452	0	5,242	20,320	n/a	61,447	2,377,995
2015	1,424,967	712,401	266	0	333,447	0	5,231	31,212	n/a	45,320	1,977,163

(continued)

Table G.5A.—*continued*

Period	Factors absorbing reserve funds										Reserve balances with Federal Reserve Banks
	Currency in circulation	Reverse repurchase agreements[6]	Treasury cash holdings[7]	Deposits with Federal Reserve Banks, other than reserve balances					Required clearing balances[9]	Other Federal Reserve liabilities and capital[4,10]	
				Term deposits	Treasury general account	Treasury supplementary financing account	Foreign	Other[8]			
2016	1,509,440	725,210	166	0	399,190	0	5,165	53,248	n/a	46,943	1,759,675
2017	1,618,006	563,958	214	0	228,933	0	5,257	77,762	n/a	47,876	1,954,426
2018	1,719,302	304,012	214	0	402,138	0	5,245	73,073	n/a	45,007	1,555,954
2019	1,807,740	336,649	171	0	403,853	0	5,182	74,075	n/a	44,867	1,548,849
2020	2,089,224	216,051	28	0	1,728,569	0	21,838	194,327	n/a	49,075	2,994,932
2020, month-end											
Jan.	1,791,721	247,578	218	0	403,983	0	5,182	62,622	n/a	43,484	1,642,425
Feb.	1,801,222	228,944	287	0	357,251	0	5,187	77,563	n/a	44,156	1,690,931
Mar.	1,878,734	569,082	328	0	515,257	0	17,395	280,772	n/a	55,259	2,474,282
Apr.	1,911,867	279,813	301	0	1,180,035	0	16,351	203,242	n/a	63,655	3,070,191
May	1,948,861	257,920	207	0	1,449,129	0	16,278	168,672	n/a	48,298	3,215,150
Jun.	1,970,172	232,957	66	0	1,722,032	0	16,223	164,703	n/a	46,928	2,787,035
Jul.	1,995,243	226,178	49	0	1,763,090	0	16,229	136,719	n/a	47,290	2,689,036
Aug.	2,017,111	221,435	62	0	1,705,982	0	16,620	145,873	n/a	47,791	2,785,042
Sep.	2,032,544	205,233	25	0	1,781,679	0	18,916	160,477	n/a	47,545	2,743,246
Oct.	2,045,796	204,912	49	0	1,598,798	0	21,251	183,348	n/a	47,997	2,981,246
Nov.	2,067,346	191,550	44	0	1,622,986	0	21,284	165,736	n/a	49,737	3,029,883
Dec.	2,089,224	216,051	28	0	1,728,569	0	21,838	194,327	n/a	49,075	2,994,932

[6] Cash value of agreements, which are collaterized by U.S. Treasury securities, federal agency debt securities, and agency mortgage-backed securities.
[7] Coin and paper currency held by the Treasury.
[8] As of 2014, includes deposits of designated financial market utilities.
[9] Required clearing balances were discontinued in July 2012.
[10] In 2010, includes funds from American International Group, Inc. asset dispositions, held as agent. In 2020, includes equity investments in Commercial Paper Funding Facility II LLC, Corporate Credit Facilities LLC, MS Facilities LLC (Main Street Lending Program), Municipal Facility LLC, and Term Asset-Backed Securities Loan Facility II LLC.
n/a Not applicable.

Table G.5B. Reserves of depository institutions, Federal Reserve Bank credit, and related items, year-end 1918–1983

Millions of dollars

Period	Factors supplying reserve funds									
	Federal Reserve Bank credit outstanding							Gold stock[6]	Special drawing rights certificate account	Treasury currency outstanding[7]
	Securities held outright[1]	Repurchase agreements[2]	Loans	Float[3]	All other[4]	Other Federal Reserve assets[5]	Total			
1918	239	0	1,766	199	294	0	2,498	2,873	n/a	1,795
1919	300	0	2,215	201	575	0	3,292	2,707	n/a	1,707
1920	287	0	2,687	119	262	0	3,355	2,639	n/a	1,709
1921	234	0	1,144	40	146	0	1,563	3,373	n/a	1,842
1922	436	0	618	78	273	0	1,405	3,642	n/a	1,958
1923	80	54	723	27	355	0	1,238	3,957	n/a	2,009
1924	536	4	320	52	390	0	1,302	4,212	n/a	2,025
1925	367	8	643	63	378	0	1,459	4,112	n/a	1,977
1926	312	3	637	45	384	0	1,381	4,205	n/a	1,991
1927	560	57	582	63	393	0	1,655	4,092	n/a	2,006
1928	197	31	1,056	24	500	0	1,809	3,854	n/a	2,012
1929	488	23	632	34	405	0	1,583	3,997	n/a	2,022
1930	686	43	251	21	372	0	1,373	4,306	n/a	2,027
1931	775	42	638	20	378	0	1,853	4,173	n/a	2,035
1932	1,851	4	235	14	41	0	2,145	4,226	n/a	2,204
1933	2,435	2	98	15	137	0	2,688	4,036	n/a	2,303
1934	2,430	0	7	5	21	0	2,463	8,238	n/a	2,511
1935	2,430	1	5	12	38	0	2,486	10,125	n/a	2,476
1936	2,430	0	3	39	28	0	2,500	11,258	n/a	2,532
1937	2,564	0	10	19	19	0	2,612	12,760	n/a	2,637
1938	2,564	0	4	17	16	0	2,601	14,512	n/a	2,798
1939	2,484	0	7	91	11	0	2,593	17,644	n/a	2,963
1940	2,184	0	3	80	8	0	2,274	21,995	n/a	3,087
1941	2,254	0	3	94	10	0	2,361	22,737	n/a	3,247
1942	6,189	0	6	471	14	0	6,679	22,726	n/a	3,648
1943	11,543	0	5	681	10	0	12,239	21,938	n/a	4,094
1944	18,846	0	80	815	4	0	19,745	20,619	n/a	4,131
1945	24,262	0	249	578	2	0	25,091	20,065	n/a	4,339
1946	23,350	0	163	580	1	0	24,093	20,529	n/a	4,562
1947	22,559	0	85	535	1	0	23,181	22,754	n/a	4,562
1948	23,333	0	223	541	1	0	24,097	24,244	n/a	4,589
1949	18,885	0	78	534	2	0	19,499	24,427	n/a	4,598
1950	20,725	53	67	1,368	3	0	22,216	22,706	n/a	4,636
1951	23,605	196	19	1,184	5	0	25,009	22,695	n/a	4,709
1952	24,034	663	156	967	4	0	25,825	23,187	n/a	4,812
1953	25,318	598	28	935	2	0	26,880	22,030	n/a	4,894
1954	24,888	44	143	808	1	0	25,885	21,713	n/a	4,985
1955	24,391	394	108	1,585	29	0	26,507	21,690	n/a	5,008
1956	24,610	305	50	1,665	70	0	26,699	21,949	n/a	5,066
1957	23,719	519	55	1,424	66	0	25,784	22,781	n/a	5,146
1958	26,252	95	64	1,296	49	0	27,755	20,534	n/a	5,234

(continued)

Table G.5B.—*continued*

Period	Factors supplying reserve funds									
	Federal Reserve Bank credit outstanding							Gold stock[6]	Special drawing rights certificate account	Treasury currency outstanding[7]
	Securities held outright[1]	Repurchase agreements[2]	Loans	Float[3]	All other[4]	Other Federal Reserve assets[5]	Total			
1959	26,607	41	458	1,590	75	0	28,771	19,456	n/a	5,311
1960	26,984	400	33	1,847	74	0	29,338	17,767	n/a	5,398
1961	28,722	159	130	2,300	51	0	31,362	16,889	n/a	5,585
1962	30,478	342	38	2,903	110	0	33,871	15,978	n/a	5,567
1963	33,582	11	63	2,600	162	0	36,418	15,513	n/a	5,578
1964	36,506	538	186	2,606	94	0	39,930	15,388	n/a	5,405
1965	40,478	290	137	2,248	187	0	43,340	13,733	n/a	5,575
1966	43,655	661	173	2,495	193	0	47,177	13,159	n/a	6,317
1967	48,980	170	141	2,576	164	0	52,031	11,982	n/a	6,784
1968	52,937	0	186	3,443	58	0	56,624	10,367	n/a	6,795
1969	57,154	0	183	3,440	64	2,743	63,584	10,367	n/a	6,852
1970	62,142	0	335	4,261	57	1,123	67,918	10,732	400	7,147
1971	69,481	1,323	39	4,343	261	1,068	76,515	10,132	400	7,710
1972	71,119	111	1,981	3,974	106	1,260	78,551	10,410	400	8,313
1973	80,395	100	1,258	3,099	68	1,152	86,072	11,567	400	8,716
1974	84,760	954	299	2,001	999	3,195	92,208	11,652	400	9,253
1975	92,789	1,335	211	3,688	1,126	3,312	102,461	11,599	500	10,218
1976	100,062	4,031	25	2,601	991	3,182	110,892	11,598	1,200	10,810
1977	108,922	2,352	265	3,810	954	2,442	118,745	11,718	1,250	11,331
1978	117,374	1,217	1,174	6,432	587	4,543	131,327	11,671	1,300	11,831
1979	124,507	1,660	1,454	6,767	704	5,613	140,705	11,172	1,800	13,083
1980	128,038	2,554	1,809	4,467	776	8,739	146,383	11,160	2,518	13,427
1981	136,863	3,485	1,601	1,762	195	9,230	153,136	11,151	3,318	13,687
1982	144,544	4,293	717	2,735	1,480	9,890	163,659	11,148	4,618	13,786
1983	159,203	1,592	918	1,605	418	8,728	172,464	11,121	4,618	15,732

Note: For a description of figures and discussion of their significance, see *Banking and Monetary Statistics*, 1941–1970 (Board of Governors of the Federal Reserve System, 1976), pp. 507–23. Components may not sum to totals because of rounding.

1 In 1969 and thereafter, includes securities loaned—fully guaranteed by U.S. government securities pledged with Federal Reserve Banks—and excludes securities sold and scheduled to be bought back under matched sale–purchase transactions. On September 29, 1971, and thereafter, includes federal agency issues bought outright.

2 On December 1, 1966, and thereafter, includes federal agency obligations held under repurchase agreements.

3 In 1960 and thereafter, figures reflect a minor change in concept; refer to *Federal Reserve Bulletin*, vol. 47 (February 1961), p. 164.

4 Principally acceptances and, until August 21, 1959, industrial loans, the authority for which expired on that date.

5 For the period before April 16, 1969, includes the total of Federal Reserve capital paid in, surplus, other capital accounts, and other liabilities and accrued dividends, less the sum of bank premises and other assets, and is reported as “Other Federal Reserve accounts”; thereafter, “Other Federal Reserve assets” and “Other Federal Reserve liabilities and capital” are shown separately.

6 Before January 30, 1934, includes gold held in Federal Reserve Banks and in circulation.

7 Includes currency and coin (other than gold) issued directly by the Treasury. The largest components are fractional and dollar coins. For details refer to “U.S. Currency and Coin Outstanding and in Circulation,” *Treasury Bulletin*.

n/a Not applicable.

Table G.5B. Reserves of depository institutions, Federal Reserve Bank credit, and related items, year-end 1918–1983—*continued*

Millions of dollars

Period	Factors absorbing reserve funds								Member bank reserves[9]			
	Currency in circulation	Treasury cash holdings[8]	Deposits with Federal Reserve Banks, other than reserve balances			Other Federal Reserve accounts[5]	Required clearing balances	Other Federal Reserve liabilities and capital[5]	With Federal Reserve Banks	Currency and coin[10]	Required[11]	Excess[11,12]
			Treasury	Foreign	Other							
1918	4,951	288	51	96	25	118	0	0	1,636	n/a	1,585	51
1919	5,091	385	31	73	28	208	0	0	1,890	n/a	1,822	68
1920	5,325	218	57	5	18	298	0	0	1,781	n/a	n/a	n/a
1921	4,403	214	96	12	15	285	0	0	1,753	n/a	1,654	99
1922	4,530	225	11	3	26	276	0	0	1,934	n/a	n/a	n/a
1923	4,757	213	38	4	19	275	0	0	1,898	n/a	1,884	14
1924	4,760	211	51	19	20	258	0	0	2,220	n/a	2,161	59
1925	4,817	203	16	8	21	272	0	0	2,212	n/a	2,256	-44
1926	4,808	201	17	46	19	293	0	0	2,194	n/a	2,250	-56
1927	4,716	208	18	5	21	301	0	0	2,487	n/a	2,424	63
1928	4,686	202	23	6	21	348	0	0	2,389	n/a	2,430	-41
1929	4,578	216	29	6	24	393	0	0	2,355	n/a	2,428	-73
1930	4,603	211	19	6	22	375	0	0	2,471	n/a	2,375	96
1931	5,360	222	54	79	31	354	0	0	1,961	n/a	1,994	-33
1932	5,388	272	8	19	24	355	0	0	2,509	n/a	1,933	576
1933	5,519	284	3	4	128	360	0	0	2,729	n/a	1,870	859
1934	5,536	3,029	121	20	169	241	0	0	4,096	n/a	2,282	1,814
1935	5,882	2,566	544	29	226	253	0	0	5,587	n/a	2,743	2,844
1936	6,543	2,376	244	99	160	261	0	0	6,606	n/a	4,622	1,984
1937	6,550	3,619	142	172	235	263	0	0	7,027	n/a	5,815	1,212
1938	6,856	2,706	923	199	242	260	0	0	8,724	n/a	5,519	3,205
1939	7,598	2,409	634	397	256	251	0	0	11,653	n/a	6,444	5,209
1940	8,732	2,213	368	1,133	599	284	0	0	14,026	n/a	7,411	6,615
1941	11,160	2,215	867	774	586	291	0	0	12,450	n/a	9,365	3,085
1942	15,410	2,193	799	793	485	256	0	0	13,117	n/a	11,129	1,988
1943	20,449	2,303	579	1,360	356	339	0	0	12,886	n/a	11,650	1,236
1944	25,307	2,375	440	1,204	394	402	0	0	14,373	n/a	12,748	1,625
1945	28,515	2,287	977	862	446	495	0	0	15,915	n/a	14,457	1,458
1946	28,952	2,272	393	508	314	607	0	0	16,139	n/a	15,577	562
1947	28,868	1,336	870	392	569	563	0	0	17,899	n/a	16,400	1,499
1948	28,224	1,325	1123	642	547	590	0	0	20,479	n/a	19,277	1,202
1949	27,600	1,312	821	767	750	706	0	0	16,568	n/a	15,550	1,018
1950	27,741	1,293	668	895	565	714	0	0	17,681	n/a	16,509	1,172
1951	29,206	1,270	247	526	363	746	0	0	20,056	n/a	19,667	389
1952	30,433	1,270	389	550	455	777	0	0	19,950	n/a	20,520	-570
1953	30,781	761	346	423	493	839	0	0	20,160	n/a	19,397	763
1954	30,509	796	563	490	441	907	0	0	18,876	n/a	18,618	258
1955	31,158	767	394	402	554	925	0	0	19,005	n/a	18,903	102
1956	31,790	775	441	322	426	901	0	0	19,059	n/a	19,089	-30
1957	31,834	761	481	356	246	998	0	0	19,034	n/a	19,091	-57

(continued)

Table G.5B.—*continued*

Period	Factors absorbing reserve funds								Member bank reserves[9]			
	Currency in circulation	Treasury cash holdings[8]	Deposits with Federal Reserve Banks, other than reserve balances			Other Federal Reserve accounts[5]	Required clearing balances	Other Federal Reserve liabilities and capital[5]	With Federal Reserve Banks	Currency and coin[10]	Required[11]	Excess[11,12]
			Treasury	Foreign	Other							
1958	32,193	683	358	272	391	1,122	0	0	18,504	n/a	18,574	-70
1959	32,591	391	504	345	694	841	0	0	18,174	310	18,619	-135
1960	32,869	377	485	217	533	941	0	0	17,081	2,544	18,988	637
1961	33,918	422	465	279	320	1,044	0	0	17,387	2,823	20,114	96
1962	35,338	380	597	247	393	1,007	0	0	17,454	3,262	20,071	645
1963	37,692	361	880	171	291	1,065	0	0	17,049	4,099	20,677	471
1964	39,619	612	820	229	321	1,036	0	0	18,086	4,151	21,663	574
1965	42,056	760	668	150	355	211	0	0	18,447	4,163	22,848	-238
1966	44,663	1,176	416	174	588	-147	0	0	19,779	4,310	24,321	-232
1967	47,226	1,344	1,123	135	653	-773	0	0	21,092	4,631	25,905	-182
1968	50,961	695	703	216	747	-1,353	0	0	21,818	4,921	27,439	-700
1969	53,950	596	1,312	134	807	0	0	1,919	22,085	5,187	28,173	-901
1970	57,093	431	1,156	148	1,233	0	0	1,986	24,150	5,423	30,033	-460
1971	61,068	460	2,020	294	999	0	0	2,131	27,788	5,743	32,496	1,035
1972	66,516	345	1,855	325	840	0	0	2,143	25,647	6,216	32,044	98
1973	72,497	317	2,542	251	1,149[13]	0	0	2,669	27,060	6,781	35,268	-1,360
1974	79,743	185	3,113	418	1,275[13]	0	0	2,935	25,843	7,370	37,011	-3,798
1975	86,547	483	7,285	353	1,090	0	0	2,968	26,052	8,036	35,197	-1,103[14]
1976	93,717	460	10,393	352	1,357	0	0	3,063	25,158	8,628	35,461	-1,535
1977	103,811	392	7,114	379	1,187	0	0	3,292	26,870	9,421	37,615	-1,265
1978	114,645	240	4,196	368	1,256	0	0	4,275	31,152	10,538	42,694	-893
1979	125,600	494	4,075	429	1,412	0	0	4,957	29,792	11,429	44,217	-2,835
1980	136,829	441	3,062	411	617	0	0	4,671	27,456	13,654	40,558	675
1981	144,774	443	4,301	505	781	0	117	5,261	25,111	15,576	42,145	-1,442
1982	154,908	429	5,033	328	1,033	0	436	4,990	26,053	16,666	41,391	1,328
1983	171,935	479	3,661	191	851	0	1,013	5,392	20,413	17,821	39,179	-945

8 Coin and paper currency held by the Treasury, as well as any gold in excess of the gold certificates issued to the Reserve Bank.
9 In November 1979 and thereafter, includes reserves of member banks, Edge Act corporations, and U.S. agencies and branches of foreign banks. On November 13, 1980, and thereafter, includes reserves of all depository institutions.
10 Between December 1, 1959, and November 23, 1960, part was allowed as reserves; thereafter, all was allowed.
11 Estimated through 1958. Before 1929, data were available only on call dates (in 1920 and 1922 the call date was December 29). Since September 12, 1968, the amount has been based on close-of-business figures for the reserve period two weeks before the report date.
12 For the week ending November 15, 1972, and thereafter, includes $450 million of reserve deficiencies on which Federal Reserve Banks are allowed to waive penalties for a transition period in connection with bank adaptation to Regulation J as amended, effective November 9, 1972. Allowable deficiencies are as follows (beginning with first statement week of quarter, in millions): 1973—Q1, $279; Q2, $172; Q3, $112; Q4, $84; 1974—Q1, $67; Q2, $58. The transition period ended with the second quarter of 1974.
13 For the period before July 1973, includes certain deposits of domestic nonmember banks and foreign-owned banking institutions held with member banks and redeposited in full with Federal Reserve Banks in connection with voluntary participation by nonmember institutions in the Federal Reserve System program of credit restraint. As of December 12, 1974, the amount of voluntary nonmember bank and foreign-agency and branch deposits at Federal Reserve Banks that are associated with marginal reserves is no longer reported. However, two amounts are reported: (1) deposits voluntarily held as reserves by agencies and branches of foreign banks operating in the United States and (2) Eurodollar liabilities.
14 Adjusted to include waivers of penalties for reserve deficiencies, in accordance with change in Board policy, effective November 19, 1975.
n/a Not applicable.

Table G.6. Principal assets and liabilities of insured commercial banks, June 30, 2020 and 2019
Millions of dollars, except as noted

Item	Total	Member banks			Nonmember banks
		Total	National	State	
2020					
Assets					
Loans and investments	13,768,118	10,957,632	8,917,674	2,039,958	2,810,485
Loans, gross	9,773,863	7,478,505	6,065,786	1,412,719	2,295,358
Net	9,770,358	7,476,610	6,064,359	1,412,252	2,293,748
Investments	3,994,254	3,479,127	2,851,888	627,239	515,127
U.S. government securities	796,738	757,345	668,668	88,677	39,393
Other	3,197,517	2,721,782	2,183,220	538,562	475,734
Cash assets, total	2,189,551	1,895,457	1,516,153	379,304	294,094
Liabilities					
Deposits, total	14,391,906	11,724,208	9,591,713	2,132,494	2,667,699
Interbank	305,180	282,167	235,742	46,425	23,013
Other transactions	2,865,179	2,362,351	1,718,761	643,590	502,828
Other nontransactions	11,221,548	9,079,690	7,637,210	1,442,480	2,141,858
Equity capital	2,008,346	1,632,639	1,330,759	301,880	375,707
Number of banks	4,421	1,479	778	701	2,942
2019					
Assets					
Loans and investments	12,443,668	10,118,249	7,977,653	2,140,595	2,325,419
Loans, gross	9,068,571	7,171,574	5,640,140	1,531,434	1,896,997
Net	9,066,524	7,170,233	5,639,087	1,531,147	1,896,291
Investments	3,375,097	2,946,675	2,337,514	609,161	428,422
U.S. government securities	517,970	490,846	421,415	69,430	27,125
Other	2,857,127	2,455,830	1,916,098	539,731	401,297
Cash assets, total	1,044,605	894,894	708,430	186,464	149,711
Liabilities					
Deposits, total	11,764,419	9,668,697	7,666,782	2,001,915	2,095,722
Interbank	259,729	237,395	193,824	43,570	22,335
Other transactions	1,923,550	1,577,689	1,196,523	381,166	345,860
Other nontransactions	9,581,140	7,853,613	6,276,435	1,577,178	1,727,527
Equity capital	1,955,665	1,627,673	1,287,905	339,768	327,991
Number of banks	4,621	1,542	798	744	3,079

Note: Includes U.S.-insured commercial banks located in the United States but not U.S.-insured commercial banks operating in U.S. territories or possessions. Data are domestic assets and liabilities (except for those components reported on a consolidated basis only). Components may not sum to totals because of rounding. Data for 2019 have been revised.

Table G.7. Initial margin requirements under Regulations T, U, and X
Percent of market value

Effective date	Margin stocks	Convertible bonds	Short sales, T only[1]
1934, Oct. 1	25–45	n/a	n/a
1936, Feb. 1	25–55	n/a	n/a
1936, Apr. 1	55	n/a	n/a
1937, Nov. 1	40	n/a	50
1945, Feb. 5	50	n/a	50
1945, July 5	75	n/a	75
1946, Jan. 21	100	n/a	100
1947, Feb. 1	75	n/a	75
1949, Mar. 3	50	n/a	50
1951, Jan. 17	75	n/a	75
1953, Feb. 20	50	n/a	50
1955, Jan. 4	60	n/a	60
1955, Apr. 23	70	n/a	70
1958, Jan. 16	50	n/a	50
1958, Aug. 5	70	n/a	70
1958, Oct. 16	90	n/a	90
1960, July 28	70	n/a	70
1962, July 10	50	n/a	50
1963, Nov. 6	70	n/a	70
1968, Mar. 11	70	50	70
1968, June 8	80	60	80
1970, May 6	65	50	65
1971, Dec. 6	55	50	55
1972, Nov. 24	65	50	65
1974, Jan. 3	50	50	50

Note: These regulations, adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit that may be extended for the purpose of purchasing or carrying margin securities (as defined in the regulations) when the loan is collateralized by such securities. The margin requirement, expressed as a percentage, is the difference between the market value of the securities being purchased or carried (100 percent) and the maximum loan value of the collateral as prescribed by the Board. Regulation T was adopted effective October 1, 1934; Regulation U, effective May 1, 1936; and Regulation X, effective November 1, 1971. The former Regulation G, which was adopted effective March 11, 1968, was merged into Regulation U, effective April 1, 1998.

[1] From October 1, 1934, to October 31, 1937, the requirement was the margin "customarily required" by the brokers and dealers.

n/a Not applicable.

Table G.8A. Statement of condition of the Federal Reserve Banks, by Bank, December 31, 2020 and 2019
Millions of dollars

Item	Total		Boston		New York		Philadelphia		Cleveland		Richmond	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Assets												
Gold certificates	11,037	11,037	337	351	3,665	3,707	319	327	524	531	753	754
Special drawing rights certificates	5,200	5,200	196	196	1,818	1,818	210	210	237	237	412	412
Coin	1,563	1,657	31	40	39	41	130	146	86	100	206	220
Loans and securities												
Primary, secondary, and seasonal loans	1,602	42	62	*	876	10	10	0	1	0	49	0
Other loans	54,535	0	4,773	0	8,615	0	6,264	0	1,559	0	3,083	0
Securities purchased under agreements to resell[1]	1,000	255,619	22	5,303	518	139,458	23	6,190	31	7,479	63	15,643
Treasury securities, bought outright[2]	4,688,929	2,328,933	105,298	48,316	2,427,729	1,270,598	106,976	56,399	146,702	68,139	293,874	142,522
Government-sponsored enterprise debt securities, bought outright[2]	2,347	2,347	53	49	1,215	1,280	54	57	73	69	147	144
Federal agency and government-sponsored enterprise mortgage-backed securities, bought outright[3]	2,039,467	1,408,677	45,800	29,225	1,055,950	768,533	46,530	34,113	63,809	41,214	127,822	86,206
Unamortized premiums on securities held outright[4]	343,009	124,577	7,703	2,584	177,596	67,965	7,826	3,017	10,732	3,645	21,498	7,624
Unamortized discounts on securities held outright[4]	-5,532	-13,284	-124	-276	-2,864	-7,247	-126	-322	-173	-389	-347	-813
Total loans and securities	7,125,357	4,106,911	163,587	85,201	3,669,635	2,240,597	167,557	99,454	222,734	120,157	446,189	251,326
Consolidated variable interest entities: Assets held, net[5]	140,335	n/a	51,790	n/a	88,545	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Accrued interest receivable - System Open Market Account	30,057	20,746	677	432	15,548	11,303	687	505	945	610	1,895	1,280
Foreign currency denominated investments[6]	22,204	20,711	1,054	892	7,462	6,572	799	1,197	1,897	1,653	4,687	4,416
Central bank liquidity swaps[7]	17,883	3,728	849	161	6,010	1,183	644	215	1,528	298	3,775	795

(continued)

Table G.8A.—*continued*

Item	Total		Boston		New York		Philadelphia		Cleveland		Richmond	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Other assets												
Items in process of collection	132	82	*	*	*	*	*	1	*	*	*	*
Bank premises	2,229	2,211	101	105	462	463	134	92	127	119	185	193
Deferred asset - remittances to the Treasury	926	0	-12	0	1,055	0	3	0	-13	0	-45	0
All other assets[8]	2,970	1,358	1,579	43	258	335	38	29	63	56	348	307
Interdistrict settlement account	0	0	-4,919	22,285	167,835	-164,555	-8,481	-16,586	86,860	17,803	108,472	17,982
Total assets	**7,359,893**	**4,173,641**	**215,270**	**109,706**	**3,962,332**	**2,101,464**	**162,040**	**85,590**	**314,988**	**141,564**	**566,877**	**277,685**
Liabilities												
Federal Reserve notes outstanding	2,192,130	1,955,848	66,817	60,820	705,757	639,066	61,623	57,605	101,042	94,047	164,169	133,974
Less: Notes held by Federal Reserve Bank	151,855	196,421	4,534	5,475	30,162	51,623	5,594	7,978	7,610	8,280	12,910	15,317
Federal Reserve notes outstanding, net	2,040,275	1,759,427	62,283	55,345	675,595	587,443	56,029	49,627	93,432	85,767	151,259	118,657
Securities sold under agreements to repurchase[1]	216,051	336,649	4,852	6,984	111,862	183,666	4,929	8,152	6,760	9,849	13,541	20,602
Deposits												
Depository institutions	2,994,932	1,548,849	107,297	45,313	1,274,441	884,120	99,375	26,040	207,045	42,395	392,342	129,285
Treasury, general account	1,728,569	403,853	n/a	n/a	1,728,569	403,853	n/a	n/a	n/a	n/a	n/a	n/a
Foreign, official accounts	21,838	5,182	2	2	21,812	5,154	1	2	3	3	8	9
Other[9]	195,827	74,074	1,859	65	56,432	21,584	0	0	4,017	37	766	346
Total deposits	**4,941,166**	**2,031,958**	**109,158**	**45,380**	**3,081,254**	**1,314,711**	**99,376**	**26,042**	**211,065**	**42,435**	**393,116**	**129,640**
Other liabilities												
Accrued remittances to the Treasury[10]	0	2,114	0	14	0	947	0	221	0	40	0	155
Deferred credit items	698	725	0	0	0	0	0	0	0	0	0	0
Consolidated variable interest entities: Other liabilities	213	n/a	187	n/a	26	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Deposit - Treasury funding of lending facility credit protection	1,500	n/a	1,500	n/a	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
All other liabilities[11]	10,143	4,245	410	154	4,876	1,751	297	162	340	181	799	500
Total liabilities	**7,210,046**	**4,135,118**	**178,390**	**107,877**	**3,873,613**	**2,088,518**	**160,631**	**84,204**	**311,597**	**138,272**	**558,715**	**269,554**

(continued)

Table G.8A.—*continued*

Item	Total		Boston		New York		Philadelphia		Cleveland		Richmond	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Capital accounts												
Capital paid-in	32,376	31,698	1,470	1,505	10,880	10,653	1,163	1,141	2,800	2,709	6,738	6,690
Surplus (including accumulated other comprehensive loss)	6,825	6,825	310	324	2,294	2,294	245	246	590	583	1,420	1,441
Total Reserve Bank capital	39,201	38,523	1,780	1,829	13,174	12,947	1,408	1,387	3,390	3,292	8,158	8,131
Consolidated variable interest entities formed to administer credit and liquidity facilities: Non-controlling interest	110,646	n/a	35,098	n/a	75,548	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Reserve Bank capital and consolidated variable interest entities non-controlling interest	149,847	38,523	36,878	1,829	88,722	12,947	1,408	1,387	3,390	3,292	8,158	8,131
Total liabilities and capital accounts	**7,359,893**	**4,173,641**	**215,268**	**109,706**	**3,962,335**	**2,101,465**	**162,039**	**85,591**	**314,987**	**141,564**	**566,873**	**277,685**

Note: Components may not sum to totals because of rounding.

1 Contract amount of agreements.

2 Par value. Includes securities loaned—fully collateralized by U.S. Treasury securities, other investment-grade securities, and collateral eligible for tri-party repurchase agreements pledged with Federal Reserve Banks.

3 The par amount shown is the remaining principal balance of the securities.

4 Reflects the premium or discount, which is the difference between the purchase price and the face value of the securities that has not been amortized.

5 The Federal Reserve Bank of Boston is the primary beneficiary of MS Facilities LLC (Main Street Lending Program), and the Federal Reserve Bank of New York is the primary beneficiary of Commercial Paper Funding Facility LLC, Corporate Credit Facilities LLC, Municipal Liquidity Facility LLC, and Term Asset-Backed Securities Loan Facility II LLC. As a result, the accounts and results of operations of those LLCs are included in the combined financial statements of the Federal Reserve Banks.

6 Valued daily at market exchange rates.

7 Dollar value of foreign currency held under these agreements valued at the exchange rate to be used when the foreign currency is returned to the foreign central bank. This exchange rate equals the market exchange rate used when the foreign currency was acquired from the foreign central bank.

8 Includes furniture and equipment and depository institution overdrafts.

9 Includes deposits of government-sponsored enterprises (GSEs), the Consumer Financial Protection Bureau, international organizations, and designated financial market utilities.

10 Represents the estimated weekly remittances to the U.S. Treasury.

11 Includes accrued benefit costs and cash collateral posted by counterparties under commitments to purchase and sell federal agency and GSE MBS.

* Less than $500,000.

n/a Not applicable.

Table G.8A. Statement of condition of the Federal Reserve Banks, by Bank, December 31, 2020 and 2019—*continued*

Millions of dollars

Item	Atlanta		Chicago		St. Louis		Minneapolis		Kansas City		Dallas		San Francisco	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Assets														
Gold certificates	1,529	1,560	713	711	329	328	180	186	297	292	920	890	1,471	1,400
Special drawing rights certificates	654	654	424	424	150	150	90	90	153	153	282	282	574	574
Coin	154	169	258	276	33	31	43	48	106	113	183	192	293	282
Loans and securities														
Primary, secondary, and seasonal loans	37	1	95	19	1	1	10	9	16	1	47	*	398	1
Other Loans, net	2,120	0	1,403	0	1,383	0	7,945	0	4,451	0	1,865	0	11,073	0
Securities purchased under agreements to resell[1]	74	17,477	56	13,418	16	3,674	9	2,212	16	3,790	48	11,099	124	29,875
Treasury securities, bought outright[2]	345,557	159,236	261,899	122,249	74,084	33,473	44,314	20,153	74,564	34,534	225,979	101,125	581,953	272,189
Government-sponsored enterprise debt securities, bought outright[2]	173	160	131	123	37	34	22	20	37	35	113	102	291	274
Federal agency and government-sponsored enterprise mortgage-backed securities, bought outright[3]	150,301	96,316	113,914	73,943	32,223	20,246	19,274	12,190	32,432	20,888	98,290	61,166	253,123	164,636
Unamortized premiums on securities held outright[4]	25,279	8,518	19,159	6,539	5,419	1,790	3,242	1,078	5,455	1,847	16,531	5,409	42,572	14,560
Unamortized discounts on securities held outright[4]	-408	-908	-309	-697	-87	-191	-52	-115	-88	-197	-267	-577	-687	-1,553
Total loans and securities	523,133	280,800	396,348	215,594	113,076	59,027	74,764	35,547	116,883	60,898	342,606	178,324	888,847	479,982
Consolidated variable interest entities: Assets held, net[5]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Accrued interest receivable - System Open Market Account	2,213	1,418	1,677	1,088	475	298	284	179	478	307	1,446	899	3,732	2,427
Foreign currency denominated investments[6]	1,101	1,204	862	865	364	316	174	98	234	201	264	256	3,306	3,041
Central bank liquidity swaps[7]	887	217	694	156	293	57	140	18	189	36	212	46	2,663	547

(continued)

Table G.8A.—*continued*

Item	Atlanta		Chicago		St. Louis		Minneapolis		Kansas City		Dallas		San Francisco	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Other assets														
Items in process of collection	132	81	*	*	*	*	*	*	*	*	*	*	*	*
Bank premises	200	203	186	194	97	102	91	93	231	228	219	224	197	196
Deferred asset - remittances to the Treasury	-68	0	17	0	11	0	9	0	2	0	24	0	-57	0
All other assets[8]	85	80	52	46	100	107	83	66	131	103	59	57	177	130
Interdistrict settle-ment account	-112,353	32,067	5,189	32,779	-19,246	10,206	-12,985	4,961	-12,766	12,287	-31,818	23,822	-165,789	6,951
Total assets	**417,667**	**318,453**	**406,420**	**252,133**	**95,682**	**70,622**	**62,873**	**41,286**	**105,938**	**74,618**	**314,397**	**204,992**	**735,414**	**495,530**
Liabilities														
Federal Reserve notes outstanding	302,765	273,526	142,287	126,522	63,686	59,561	36,247	31,925	59,920	54,132	186,470	164,272	301,347	260,398
Less: Notes held by Federal Reserve Bank	21,798	29,567	9,680	11,593	4,660	4,775	2,680	2,837	4,736	6,680	13,854	18,681	33,638	33,616
Federal Reserve notes outstanding, net	280,967	243,959	132,607	114,929	59,026	54,786	33,567	29,088	55,184	47,452	172,616	145,591	267,709	226,782
Securities sold under agreements to repurchase[1]	15,922	23,018	12,067	17,671	3,414	4,839	2,042	2,913	3,436	4,992	10,412	14,618	26,815	39,345
Deposits														
Depository institutions	114,835	47,428	140,534	69,052	32,260	10,200	26,641	8,744	40,311	19,336	125,751	43,935	434,101	223,003
Treasury, general account	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Foreign, official accounts	2	2	2	2	1	1	0	*	0	*	0	*	6	6
Other[9]	2,804	913	119,069	48,592	1	3	87	103	6,324	2,256	4,446	74	21	102
Total deposits	**117,641**	**48,343**	**259,605**	**117,646**	**32,262**	**10,204**	**26,728**	**8,847**	**46,635**	**21,592**	**130,197**	**44,009**	**434,128**	**223,111**
Other liabilities														
Accrued remittances to the Treasury[10]	0	256	0	90	0	41	0	3	0	13	0	123	0	212
Deferred credit items	696	713	0	0	0	0	0	*	3	12	0	0	0	0
Consolidated variable interest entities: Other liabilities	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Deposit - Treasury funding of lending facility credit protection	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
All other liabilities[11]	668	254	604	301	238	120	201	134	257	151	464	194	989	344
Total liabilities	**415,894**	**316,543**	**404,883**	**250,637**	**94,940**	**69,990**	**62,538**	**40,985**	**105,515**	**74,212**	**313,689**	**204,535**	**729,641**	**489,794**

(continued)

Table G.8A.—*continued*

Item	Atlanta		Chicago		St. Louis		Minneapolis		Kansas City		Dallas		San Francisco	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Capital accounts														
Capital paid-in	1,464	1,572	1,269	1,231	616	520	275	248	350	334	583	376	4,768	4,720
Surplus (including accumulated other comprehensive loss)	309	338	267	265	130	112	58	53	74	72	123	81	1,005	1,016
Total Reserve Bank capital	1,773	1,910	1,536	1,496	746	632	333	301	424	406	706	457	5,773	5,736
Consolidated variable interest entities formed to administer credit and liquidity facilities: Non-controlling interest	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Reserve Bank capital and consolidated variable interest entities non-controlling interest	1,773	1,910	1,536	1,496	746	632	333	301	424	406	706	457	5,773	5,736
Total liabilities and capital accounts	**417,667**	**318,453**	**406,419**	**252,133**	**95,686**	**70,622**	**62,871**	**41,286**	**105,939**	**74,618**	**314,395**	**204,992**	**735,414**	**495,530**

Note: Components may not sum to totals because of rounding.

1 Contract amount of agreements.

2 Par value. Includes securities loaned—fully collateralized by U.S. Treasury securities, other investment-grade securities, and collateral eligible for tri-party repurchase agreements pledged with Federal Reserve Banks.

3 The par amount shown is the remaining principal balance of the securities.

4 Reflects the premium or discount, which is the difference between the purchase price and the face value of the securities that has not been amortized.

5 The Federal Reserve Bank of Boston is the primary beneficiary of MS Facilities LLC (Main Street Lending Program), and the Federal Reserve Bank of New York is the primary beneficiary of Commercial Paper Funding Facility LLC, Corporate Credit Facilities LLC, Municipal Liquidity Facility LLC, and Term Asset-Backed Securities Loan Facility II LLC. As a result, the accounts and results of operations of those LLCs are included in the combined financial statements of the Federal Reserve Banks.

6 Valued daily at market exchange rates.

7 Dollar value of foreign currency held under these agreements valued at the exchange rate to be used when the foreign currency is returned to the foreign central bank. This exchange rate equals the market exchange rate used when the foreign currency was acquired from the foreign central bank.

8 Includes furniture and equipment and depository institution overdrafts.

9 Includes deposits of government-sponsored enterprises (GSEs), the Consumer Financial Protection Bureau, international organizations, and designated financial market utilities.

10 Represents the estimated weekly remittances to the U.S. Treasury.

11 Includes accrued benefit costs and cash collateral posted by counterparties under commitments to purchase and sell federal agency and GSE MBS.

* Less than $500,000.

n/a Not applicable.

Table G.8B. Statement of condition of the Federal Reserve Banks, December 31, 2020 and 2019 Supplemental information—collateral held against Federal Reserve notes: Federal Reserve agents' accounts

Millions of dollars

Item	2020	2019
Federal Reserve notes outstanding	2,192,130	1,955,848
Less: Notes held by Federal Reserve Banks not subject to collateralization	151,855	196,421
Collateralized Federal Reserve notes	**2,040,275**	**1,759,427**
Collateral for Federal Reserve notes		
Gold certificates	11,037	11,037
Special drawing rights certificates	5,200	5,200
U.S. Treasury securities[1]	2,024,038	1,743,190
Total collateral	**2,040,275**	**1,759,427**

[1] Face value. Includes compensation to adjust for the effect of inflation on the original face value of inflation-indexed securities.

Table G.9. Income and expenses of the Federal Reserve Banks, by Bank, 2020
Thousands of dollars

Item	Total	Boston	New York	Philadelphia	Cleveland	Richmond
Current income						
Interest income						
Primary, secondary, and seasonal loans	22,180	711	14,513	201	283	215
Other loans, net	336,222	186,634	37,059	12,755	4,178	10,749
Interest income on securities purchased under agreements to resell	723,351	15,115	392,880	17,428	21,292	44,360
Treasury securities	67,539,231	1,484,766	35,488,362	1,567,067	2,075,193	4,205,362
Government-sponsored enterprise debt securities, net	135,187	2,968	71,104	3,140	4,149	8,414
Federal agency and government-sponsored enterprise mortgage-backed securities, net	32,338,364	706,765	17,059,675	753,729	988,692	2,009,975
Foreign currency denominated investments, net	(40,475)	(1,879)	(13,424)	(1,664)	(3,405)	(8,564)
Central bank liquidity swaps[1]	488,440	23,033	163,500	18,329	41,546	103,169
Total interest income	101,542,499	2,418,112	53,213,669	2,370,985	3,131,926	6,373,679
Income from priced services	446,201	–	128,081	–	–	–
Securities lending fees	32,783	712	17,361	767	997	2,034
Other income	14,684	394	8,842	266	432	717
Total other income	493,668	1,106	154,283	1,033	1,430	2,751
Total current income	**102,036,167**	**2,419,218**	**53,367,952**	**2,372,018**	**3,133,356**	**6,376,430**
Net expenses						
Personnel						
Salaries and other personnel expenses	2,783,294	157,036	596,901	117,503	128,044	394,534
Retirement and other benefits	851,976	45,002	190,633	34,242	39,529	117,094
Administrative						
Fees	515,861	36,724	59,775	12,346	12,344	296,243
Travel	21,862	1,017	2,773	683	989	3,069
Postage and other shipping costs	14,062	150	1,754	139	1,505	394
Communications	42,356	1,098	4,323	701	685	25,817
Materials and supplies	77,691	5,415	22,088	10,193	3,396	7,073
Building						
Taxes on real estate	56,523	8,738	15,861	1,741	1,597	2,405
Property depreciation	147,722	11,498	30,744	9,281	8,955	14,730
Utilities	31,322	3,106	7,250	1,264	1,260	3,466
Rent	34,374	276	2,040	57	1,003	23,601
Other building	78,255	12,735	14,970	3,917	5,039	5,478
Equipment/software						
Purchases	38,032	2,345	4,259	1,248	2,006	7,253
Rentals	2,902	273	784	216	138	642
Depreciation	80,648	1,217	5,602	1,676	1,989	50,002

(continued)

Table G.9.—*continued*

Item	Total	Boston	New York	Philadelphia	Cleveland	Richmond
Repairs and maintenance	72,099	1,802	4,434	1,883	2,286	36,493
Software	305,381	6,409	45,366	4,104	10,011	149,087
Other expenses						
Other expenses	219,155	174,351	182,592	18,349	18,637	(571,293)
Recoveries	(372,272)	(45,680)	(37,340)	(20,804)	(7,187)	(66,445)
Expenses capitalized[2]	(75,011)	(1,387)	(8,391)	(1,641)	(7,499)	(1,658)
Total operating expenses before pension expense and reimbursements	4,926,231	422,126	1,146,417	197,096	224,726	497,984
System pension service costs[3]	661,601	–	661,601	–	–	–
Reimbursements	(731,851)	(4,876)	(174,490)	(2,814)	(61,920)	(41,049)
Operating expenses	4,855,980	417,250	1,633,528	194,282	162,806	456,935
Interest expense on securities sold under agreements to repurchase	711,190	14,754	388,004	17,223	20,808	43,522
Interest to depository institutions and others	7,883,312	175,428	4,399,154	181,256	232,977	638,060
Other expenses	4,473	100	2,330	103	139	280
Net expenses	(13,454,955)	(607,531)	(6,423,017)	(392,864)	(416,729)	(1,138,797)
Current net income	88,581,212	1,811,686	46,944,935	1,979,155	2,716,627	5,237,634
Additions to (+) and deductions from (-) current net income						
Profit on sales of Treasury securities	2,440	55	1,263	56	76	153
Profit on sales of federal agency and government-sponsored enterprise mortgage-backed securities	664,061	14,911	343,842	15,151	20,775	41,618
Foreign currency translation gains (losses)	1,541,876	73,792	520,750	52,487	132,535	325,142
Other components of net benefit cost	68,067	(16,014)	225,406	(5,577)	(8,269)	(24,672)
Other additions	2,660	1	280	(0)	(1)	2,379
Other deductions	(82,772)	–	(67,759)	4	(37)	(853)
Net additions or deductions to current net income	2,196,332	72,745	1,023,783	62,119	145,079	343,767
Assessments by Board						
Board expenditures[4]	947,000	44,772	317,645	34,186	80,659	199,706
Cost of currency	831,133	34,364	171,915	33,942	52,248	71,767
Consumer Financial Protection Bureau[5]	517,300	24,261	173,536	18,950	43,791	108,690
Assessments by the Board of Governors	2,295,433	103,397	663,096	87,077	176,698	380,162
Consolidated variable interest entities						
Net income from consolidated variable interest entities	(1,784,655)	(2,400,682)	616,028	–	–	–
Non-controlling interest in consolidated variable interest entities (income), net	1,854,475	2,402,405	(547,930)	–	–	–
Reserve Bank and consolidated variable interest entities net income before providing for remittances to the Treasury	88,551,932	1,782,756	47,373,720	1,954,197	2,685,007	5,201,239
Earnings remittances to the Treasury	86,890,110	1,784,372	46,057,454	1,926,819	2,653,366	5,161,686

(continued)

Table G.9.—*continued*

Item	Total	Boston	New York	Philadelphia	Cleveland	Richmond
Net income after providing for remittances to the Treasury	1,661,821	(1,616)	1,316,266	27,378	31,641	39,552
Other comprehensive income (loss)	(1,275,509)	5,269	(1,208,652)	(12,365)	4,317	7,047
Comprehensive income	386,312	3,653	107,614	15,014	35,957	46,599
Distribution of comprehensive income						
Dividends on capital stock	386,312	17,795	107,722	15,524	29,032	66,696
Transferred to/from surplus and change in accumulated other comprehensive income	–	(14,142)	(108)	(510)	6,925	(20,097)
Earnings remittances to the Treasury	86,890,110	1,784,372	46,057,454	1,926,819	2,653,366	5,161,686
Total distribution of net income	**87,276,422**	**1,788,025**	**46,165,068**	**1,941,832**	**2,689,324**	**5,208,285**

Note: Components may not sum to totals because of rounding.

[1] Represents interest income recognized on swap agreements with foreign central banks.

[2] Includes expenses for labor and materials capitalized and depreciated or amortized as charges to activities in the periods benefited.

[3] Reflects the effect of the Financial Accounting Standards Board's Codification Topic (ASC 715) Compensation-Retirement Benefits. Pension service costs for the System Retirement Plan is recorded on behalf of the System in the books of the Federal Reserve Bank of New York.

[4] For additional details, see the Board of Governors Financial Statements at https://www.federalreserve.gov/aboutthefed/audited-annual-financial-statements.htm.

[5] The Board of Governors assesses the Reserve Banks to fund the operations of the Consumer Financial Protection Bureau. These assessments are allocated to each Reserve Bank based on each Reserve Bank's capital and surplus balances as of the most recent quarter.

Table G.9. Income and expenses of the Federal Reserve Banks, by Bank, 2020—*continued*
Thousands of dollars

Item	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Current income							
Interest income							
Primary, secondary, and seasonal loans	177	1,708	179	136	422	552	3,084
Other loans, net	8,608	7,781	4,167	13,481	13,007	6,164	31,640
Interest income on securities purchased under agreements to resell	49,794	38,182	10,487	6,310	10,794	31,711	84,998
Treasury securities	4,877,985	3,709,575	1,040,453	623,401	1,053,966	3,165,861	8,247,241
Government-sponsored enterprise debt securities, net	9,750	7,417	2,079	1,246	2,107	6,325	16,489
Federal agency and government-sponsored enterprise mortgage-backed securities, net	2,322,694	1,768,008	494,712	296,553	502,040	1,504,251	3,931,269
Foreign currency denominated investments, net	(2,089)	(1,600)	(653)	(288)	(419)	(485)	(6,007)
Central bank liquidity swaps[1]	24,520	19,069	7,967	3,718	5,121	5,816	72,652
Total interest income	7,291,440	5,550,140	1,559,391	944,557	1,587,039	4,720,195	12,381,367
Income from priced services	225,173	92,947	–	–	–	–	–
Securities lending fees	2,342	1,784	498	299	506	1,513	3,968
Other income	837	637	185	108	279	563	1,424
Total other income	228,352	95,368	683	407	786	2,077	5,392
Total current income	**7,519,792**	**5,645,509**	**1,560,074**	**944,964**	**1,587,824**	**4,722,271**	**12,386,759**
Net expenses							
Personnel							
Salaries and other personnel expenses	217,704	233,228	177,256	124,177	222,752	147,801	266,358
Retirement and other benefits	70,873	67,214	51,637	37,183	66,730	50,126	81,713
Administrative							
Fees	14,728	8,488	9,155	6,136	18,564	3,922	37,436
Travel	2,217	2,526	1,128	653	2,182	1,329	3,297
Postage and other shipping costs	2,297	238	629	264	1,161	2,139	3,392
Communications	1,466	2,075	1,298	458	1,300	1,311	1,825
Materials and supplies	4,927	7,058	1,987	2,021	5,341	3,227	4,964
Building							
Taxes on real estate	2,821	4,874	1,447	4,104	4,391	3,392	5,151
Property depreciation	12,068	15,456	7,966	4,063	8,896	10,069	13,997
Utilities	2,260	2,050	1,465	1,774	2,487	2,316	2,624
Rent	348	1,276	3,835	191	651	740	356
Other building	4,533	9,582	2,560	2,348	3,846	5,897	7,350
Equipment/software							
Purchases	2,791	3,423	2,049	2,331	5,955	1,754	2,619
Rentals	246	465	14	64	21	24	14
Depreciation	2,952	3,688	1,634	1,153	3,109	3,337	4,289

(continued)

Table G.9.—*continued*

Item	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Repairs and maintenance	5,601	3,512	1,480	1,275	2,591	3,740	7,002
Software	10,769	5,998	6,583	3,233	28,851	7,245	27,726
Other expenses							
Other expenses	147,640	33,632	154,149	2,417	(5,665)	24,661	39,686
Recoveries	(8,616)	(24,717)	(11,360)	(15,990)	(44,104)	(31,544)	(58,487)
Expenses capitalized[2]	(2,911)	(5,238)	(1,771)	(6,334)	(22,668)	(1,783)	(13,731)
Total operating expenses before pension expense and reimbursements	494,714	374,826	413,141	171,522	306,392	239,704	437,584
System pension service costs[3]	–	–	–	–	–	–	–
Reimbursements	(27,006)	(3,432)	(245,288)	(39,433)	(109,195)	(20,096)	(2,251)
Operating expenses	467,707	371,393	167,854	132,088	197,197	219,608	435,332
Interest expense on securities sold under agreements to repurchase	48,626	37,331	10,222	6,154	10,546	30,881	83,119
Interest to depository institutions and others	241,026	515,438	53,330	45,388	84,315	249,513	1,067,426
Other expenses	327	248	70	42	71	213	551
Net expenses	(757,687)	(924,410)	(231,476)	(183,673)	(292,128)	(500,215)	(1,586,429)
Current net income	6,762,105	4,721,098	1,328,598	761,292	1,295,696	4,222,057	10,800,330
Additions to (+) and deductions from (-) current net income							
Profit on sales of Treasury securities	180	136	39	23	39	118	303
Profit on sales of federal agency and government-sponsored enterprise mortgage-backed securities	48,935	37,089	10,491	6,275	10,559	32,001	82,413
Foreign currency translation gains (losses)	75,294	59,477	25,432	12,496	16,379	18,237	229,855
Other components of net benefit cost	(10,280)	(26,539)	(11,191)	(9,355)	(14,907)	(4,168)	(26,364)
Other additions	(8)	11	(0)	(0)	(0)	(0)	(1)
Other deductions	(5)	26	(14,148)	(11)	(1)	11	(0)
Net additions or deductions to current net income	114,115	70,200	10,623	9,428	12,069	46,197	286,206
Assessments by Board							
Board expenditures[4]	45,911	36,855	15,505	7,680	10,070	13,624	140,388
Cost of currency	126,439	69,961	27,744	16,126	24,521	72,150	129,956
Consumer Financial Protection Bureau[5]	26,196	20,054	8,398	4,047	5,442	7,545	76,390
Assessments by the Board of Governors	198,546	126,870	51,647	27,853	40,033	93,319	346,734
Consolidated variable interest entities							
Net income from consolidated variable interest entities	–	–	–	–	–	–	–
Non-controlling interest in consolidated variable interest entities (income), net	–	–	–	–	–	–	–
Reserve Bank and consolidated variable interest entities net income before providing for remittances to the Treasury	6,677,674	4,664,428	1,287,574	742,867	1,267,733	4,174,935	10,739,802
Earnings remittances to the Treasury	6,681,631	4,624,672	1,250,242	723,806	1,249,886	4,105,690	10,670,486

(continued)

Table G.9.—*continued*

Item	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Net income after providing for remittances to the Treasury	(3,958)	39,756	37,332	19,061	17,847	69,245	69,317
Other comprehensive income (loss)	(2,746)	(13,893)	(6,993)	(7,636)	(3,723)	(12,048)	(24,085)
Comprehensive income	(6,704)	25,863	30,339	11,425	14,124	57,197	45,231
Distribution of comprehensive income							
Dividends on capital stock	23,074	23,470	12,431	6,836	12,264	15,247	56,221
Transferred to/from surplus and change in accumulated other comprehensive income	(29,778)	2,393	17,908	4,589	1,860	41,950	(10,990)
Earnings remittances to the Treasury	6,681,631	4,624,672	1,250,242	723,806	1,249,886	4,105,690	10,670,486
Total distribution of net income	**6,674,928**	**4,650,535**	**1,280,581**	**735,231**	**1,264,009**	**4,162,888**	**10,715,717**

Note: Components may not sum to totals because of rounding.

1 Represents interest income recognized on swap agreements with foreign central banks.

2 Includes expenses for labor and materials capitalized and depreciated or amortized as charges to activities in the periods benefited.

3 Reflects the effect of the Financial Accounting Standards Board's Codification Topic (ASC 715) Compensation-Retirement Benefits. Pension service costs for the System Retirement Plan is recorded on behalf of the System in the books of the Federal Reserve Bank of New York.

4 For additional details, see the Board of Governors Financial Statements at https://www.federalreserve.gov/aboutthefed/audited-annual-financial-statements.htm.

5 The Board of Governors assesses the Reserve Banks to fund the operations of the Consumer Financial Protection Bureau. These assessments are allocated to each Reserve Bank based on each Reserve Bank's capital and surplus balances as of the most recent quarter.

Table G.10. Income and expenses of the Federal Reserve Banks, 1914–2020

Thousands of dollars

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (−)[1, 2]	Assessments by the Board of Governors			Other comprehensive income (loss)	Dividends paid	Distributions to the U.S. Treasury		Transferred to/from surplus[5]	Transferred to/from surplus and change in accumulated other comprehensive income[6]
				Board expenditures	Costs of currency	Consumer Financial Protection Bureau and Office of Financial Research[3]			Statutory transfers[4]	Interest on Federal Reserve notes		
All banks												
1914–15	2,173	2,018	6	302	n/a	n/a	n/a	217	n/a	n/a	n/a	n/a
1916	5,218	2,082	-193	192	n/a	n/a	n/a	1,743	n/a	n/a	n/a	n/a
1917	16,128	4,922	-1,387	238	n/a	n/a	n/a	6,804	1,134	n/a	n/a	1,134
1918	67,584	10,577	-3,909	383	n/a	n/a	n/a	5,541	n/a	n/a	n/a	48,334
1919	102,381	18,745	-4,673	595	n/a	n/a	n/a	5,012	2,704	n/a	n/a	70,652
1920	181,297	27,549	-3,744	710	n/a	n/a	n/a	5,654	60,725	n/a	n/a	82,916
1921	122,866	33,722	-6,315	741	n/a	n/a	n/a	6,120	59,974	n/a	n/a	15,993
1922	50,499	28,837	-4,442	723	n/a	n/a	n/a	6,307	10,851	n/a	n/a	-660
1923	50,709	29,062	-8,233	703	n/a	n/a	n/a	6,553	3,613	n/a	n/a	2,546
1924	38,340	27,768	-6,191	663	n/a	n/a	n/a	6,682	114	n/a	n/a	-3,078
1925	41,801	26,819	-4,823	709	n/a	n/a	n/a	6,916	59	n/a	n/a	2,474
1926	47,600	24,914	-3,638	722	1,714	n/a	n/a	7,329	818	n/a	n/a	8,464
1927	43,024	24,894	-2,457	779	1,845	n/a	n/a	7,755	250	n/a	n/a	5,044
1928	64,053	25,401	-5,026	698	806	n/a	n/a	8,458	2,585	n/a	n/a	21,079
1929	70,955	25,810	-4,862	782	3,099	n/a	n/a	9,584	4,283	n/a	n/a	22,536
1930	36,424	25,358	-93	810	2,176	n/a	n/a	10,269	17	n/a	n/a	-2,298
1931	29,701	24,843	311	719	1,479	n/a	n/a	10,030	n/a	n/a	n/a	-7,058
1932	50,019	24,457	-1,413	729	1,106	n/a	n/a	9,282	2,011	n/a	n/a	11,021
1933	49,487	25,918	-12,307	800	2,505	n/a	n/a	8,874	n/a	n/a	n/a	-917
1934	48,903	26,844	-4,430	1,372	1,026	n/a	n/a	8,782	n/a	n/a	-60	6,510
1935	42,752	28,695	-1,737	1,406	1,477	n/a	n/a	8,505	298	n/a	28	607
1936	37,901	26,016	486	1,680	2,178	n/a	n/a	7,830	227	n/a	103	353
1937	41,233	25,295	-1,631	1,748	1,757	n/a	n/a	7,941	177	n/a	67	2,616
1938	36,261	25,557	2,232	1,725	1,630	n/a	n/a	8,019	120	n/a	-419	1,862
1939	38,501	25,669	2,390	1,621	1,356	n/a	n/a	8,110	25	n/a	-426	4,534
1940	43,538	25,951	11,488	1,704	1,511	n/a	n/a	8,215	82	n/a	-54	17,617
1941	41,380	28,536	721	1,840	2,588	n/a	n/a	8,430	141	n/a	-4	571
1942	52,663	32,051	-1,568	1,746	4,826	n/a	n/a	8,669	198	n/a	50	3,554
1943	69,306	35,794	23,768	2,416	5,336	n/a	n/a	8,911	245	n/a	135	40,327
1944	104,392	39,659	3,222	2,296	7,220	n/a	n/a	9,500	327	n/a	201	48,410
1945	142,210	41,666	-830	2,341	4,710	n/a	n/a	10,183	248	n/a	262	81,970
1946	150,385	50,493	-626	2,260	4,482	n/a	n/a	10,962	67	n/a	28	81,467
1947	158,656	58,191	1,973	2,640	4,562	n/a	n/a	11,523	36	75,284	87	8,366

(continued)

Table G.10.—*continued*

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (−)[1, 2]	Assessments by the Board of Governors			Other comprehensive income (loss)	Dividends paid	Distributions to the U.S. Treasury		Transferred to/from surplus[5]	Transferred to/from surplus and change in accumulated other comprehensive income[6]
				Board expenditures	Costs of currency	Consumer Financial Protection Bureau and Office of Financial Research[3]			Statutory transfers[4]	Interest on Federal Reserve notes		
1948	304,161	64,280	-34,318	3,244	5,186	n/a	n/a	11,920	n/a	166,690	n/a	18,523
1949	316,537	67,931	-12,122	3,243	6,304	n/a	n/a	12,329	n/a	193,146	n/a	21,462
1950	275,839	69,822	36,294	3,434	7,316	n/a	n/a	13,083	n/a	196,629	n/a	21,849
1951	394,656	83,793	-2,128	4,095	7,581	n/a	n/a	13,865	n/a	254,874	n/a	28,321
1952	456,060	92,051	1,584	4,122	8,521	n/a	n/a	14,682	n/a	291,935	n/a	46,334
1953	513,037	98,493	-1,059	4,100	10,922	n/a	n/a	15,558	n/a	342,568	n/a	40,337
1954	438,486	99,068	-134	4,175	6,490	n/a	n/a	16,442	n/a	276,289	n/a	35,888
1955	412,488	101,159	-265	4,194	4,707	n/a	n/a	17,712	n/a	251,741	n/a	32,710
1956	595,649	110,240	-23	5,340	5,603	n/a	n/a	18,905	n/a	401,556	n/a	53,983
1957	763,348	117,932	-7,141	7,508	6,374	n/a	n/a	20,081	n/a	542,708	n/a	61,604
1958	742,068	125,831	124	5,917	5,973	n/a	n/a	21,197	n/a	524,059	n/a	59,215
1959	886,226	131,848	98,247	6,471	6,384	n/a	n/a	22,722	n/a	910,650	n/a	-93,601
1960	1,103,385	139,894	13,875	6,534	7,455	n/a	n/a	23,948	n/a	896,816	n/a	42,613
1961	941,648	148,254	3,482	6,265	6,756	n/a	n/a	25,570	n/a	687,393	n/a	70,892
1962	1,048,508	161,451	-56	6,655	8,030	n/a	n/a	27,412	n/a	799,366	n/a	45,538
1963	1,151,120	169,638	615	7,573	10,063	n/a	n/a	28,912	n/a	879,685	n/a	55,864
1964	1,343,747	171,511	726	8,655	17,230	n/a	n/a	30,782	n/a	1,582,119	n/a	-465,823
1965	1,559,484	172,111	1,022	8,576	23,603	n/a	n/a	32,352	n/a	1,296,810	n/a	27,054
1966	1,908,500	178,212	996	9,022	20,167	n/a	n/a	33,696	n/a	1,649,455	n/a	18,944
1967	2,190,404	190,561	2,094	10,770	18,790	n/a	n/a	35,027	n/a	1,907,498	n/a	29,851
1968	2,764,446	207,678	8,520	14,198	20,474	n/a	n/a	36,959	n/a	2,463,629	n/a	30,027
1969	3,373,361	237,828	-558	15,020	22,126	n/a	n/a	39,237	n/a	3,019,161	n/a	39,432
1970	3,877,218	276,572	11,442	21,228	23,574	n/a	n/a	41,137	n/a	3,493,571	n/a	32,580
1971	3,723,370	319,608	94,266	32,634	24,943	n/a	n/a	43,488	n/a	3,356,560	n/a	40,403
1972	3,792,335	347,917	-49,616	35,234	31,455	n/a	n/a	46,184	n/a	3,231,268	n/a	50,661
1973	5,016,769	416,879	-80,653	44,412	33,826	n/a	n/a	49,140	n/a	4,340,680	n/a	51,178
1974	6,280,091	476,235	-78,487	41,117	30,190	n/a	n/a	52,580	n/a	5,549,999	n/a	51,483
1975	6,257,937	514,359	-202,370	33,577	37,130	n/a	n/a	54,610	n/a	5,382,064	n/a	33,828
1976	6,623,220	558,129	7,311	41,828	48,819	n/a	n/a	57,351	n/a	5,870,463	n/a	53,940
1977	6,891,317	568,851	-177,033	47,366	55,008	n/a	n/a	60,182	n/a	5,937,148	n/a	45,728
1978	8,455,309	592,558	-633,123	53,322	60,059	n/a	n/a	63,280	n/a	7,005,779	n/a	47,268
1979	10,310,148	625,168	-151,148	50,530	68,391	n/a	n/a	67,194	n/a	9,278,576	n/a	69,141
1980	12,802,319	718,033	-115,386	62,231	73,124	n/a	n/a	70,355	n/a	11,706,370	n/a	56,821
1981	15,508,350	814,190	-372,879	63,163	82,924	n/a	n/a	74,574	n/a	14,023,723	n/a	76,897
1982	16,517,385	926,034	-68,833	61,813	98,441	n/a	n/a	79,352	n/a	15,204,591	n/a	78,320

(continued)

Table G.10.—*continued*

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (−)[1, 2]	Assessments by the Board of Governors			Other comprehensive income (loss)	Dividends paid	Distributions to the U.S. Treasury		Transferred to/from surplus[5]	Transferred to/from surplus and change in accumulated other comprehensive income[6]
				Board expenditures	Costs of currency	Consumer Financial Protection Bureau and Office of Financial Research[3]			Statutory transfers[4]	Interest on Federal Reserve notes		
1983	16,068,362	1,023,678	-400,366	71,551	152,135	n/a	n/a	85,152	n/a	14,228,816	n/a	106,663
1984	18,068,821	1,102,444	-412,943	82,116	162,606	n/a	n/a	92,620	n/a	16,054,095	n/a	161,996
1985	18,131,983	1,127,744	1,301,624	77,378	173,739	n/a	n/a	103,029	n/a	17,796,464	n/a	155,253
1986	17,464,528	1,156,868	1,975,893	97,338	180,780	n/a	n/a	109,588	n/a	17,803,895	n/a	91,954
1987	17,633,012	1,146,911	1,796,594	81,870	170,675	n/a	n/a	117,499	n/a	17,738,880	n/a	173,771
1988	19,526,431	1,205,960	-516,910	84,411	164,245	n/a	n/a	125,616	n/a	17,364,319	n/a	64,971
1989	22,249,276	1,332,161	1,254,613	89,580	175,044	n/a	n/a	129,885	n/a	21,646,417	n/a	130,802
1990	23,476,604	1,349,726	2,099,328	103,752	193,007	n/a	n/a	140,758	n/a	23,608,398	n/a	180,292
1991	22,553,002	1,429,322	405,729	109,631	261,316	n/a	n/a	152,553	n/a	20,777,552	n/a	228,356
1992	20,235,028	1,474,531	-987,788	128,955	295,401	n/a	n/a	171,763	n/a	16,774,477	n/a	402,114
1993	18,914,251	1,657,800	-230,268	140,466	355,947	n/a	n/a	195,422	n/a	15,986,765	n/a	347,583
1994	20,910,742	1,795,328	2,363,862	146,866	368,187	n/a	n/a	212,090	n/a	20,470,011	n/a	282,122
1995	25,395,148	1,818,416	857,788	161,348	370,203	n/a	n/a	230,527	n/a	23,389,367	n/a	283,075
1996	25,164,303	1,947,861	-1,676,716	162,642	402,517	n/a	n/a	255,884	5,517,716	14,565,624	n/a	635,343
1997	26,917,213	1,976,453	-2,611,570	174,407	364,454	n/a	n/a	299,652	20,658,972	0	n/a	831,705
1998	28,149,477	1,833,436	1,906,037	178,009	408,544	n/a	n/a	343,014	17,785,942	8,774,994	n/a	731,575
1999	29,346,836	1,852,162	-533,557	213,790	484,959	n/a	n/a	373,579	n/a	25,409,736	n/a	479,053
2000	33,963,992	1,971,688	-1,500,027	188,067	435,838	n/a	n/a	409,614	n/a	25,343,892	n/a	4,114,865
2001	31,870,721	2,084,708	-1,117,435	295,056	338,537	n/a	n/a	428,183	n/a	27,089,222	n/a	517,580
2002	26,760,113	2,227,078	2,149,328	205,111	429,568	n/a	n/a	483,596	n/a	24,495,490	n/a	1,068,598
2003	23,792,725	2,462,658	2,481,127	297,020	508,144	n/a	n/a	517,705	n/a	22,021,528	n/a	466,796
2004	23,539,942	2,238,705	917,870	272,331	503,784	n/a	n/a	582,402	n/a	18,078,003	n/a	2,782,587
2005	30,729,357	2,889,544	-3,576,903	265,742	477,087	n/a	n/a	780,863	n/a	21,467,545	n/a	1,271,672
2006	38,410,427	3,263,844	-158,846	301,014	491,962	n/a	n/a	871,255	n/a	29,051,678	n/a	4,271,828
2007	42,576,025	3,510,206	198,417	296,125	576,306	n/a	324,481	992,353	n/a	34,598,401	n/a	3,125,533
2008	41,045,582	4,870,374	3,340,628	352,291	500,372	n/a	-3,158,808	1,189,626	n/a	31,688,688	n/a	2,626,053
2009	54,463,121	5,978,795	4,820,204	386,400	502,044	n/a	1,006,813	1,428,202	n/a	47,430,237	n/a	4,564,460
2010	79,300,937	6,270,420	9,745,562	422,200	622,846	42,286	45,881	1,582,785	n/a	79,268,124	n/a	883,724
2011	85,241,366	7,316,643	2,015,991	472,300	648,798	281,712	-1,161,848	1,577,284	n/a	75,423,597	n/a	375,175
2012	81,586,102	7,798,353	18,380,835	490,001	722,301	387,279	-52,611	1,637,934	n/a	88,417,936	n/a	460,528
2013	91,149,953	9,134,656	-1,029,750	580,000	701,522	563,200	2,288,811	1,649,277	n/a	79,633,271	n/a	147,088
2014	116,561,512	10,714,872	-2,718,283	590,000	710,807	563,000	-1,611,569	1,685,826	n/a	96,901,695	n/a	1,064,952
2015	114,233,676	11,139,956	-1,305,513	705,000	689,288	489,700	366,145	1,742,745	25,955,921	91,143,493	n/a	-18,571,798
2016	111,743,998	17,262,620	-114,255	709,000	700,728	596,200	-183,232	711,423	91,466,545	n/a	n/a	0
2017	114,193,573	33,397,138	1,932,579	740,000	723,534	573,000	650,808	783,599	80,559,689	n/a	n/a	0

(continued)

Table G.10.—*continued*

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (−)[1, 2]	Assessments by the Board of Governors			Other comprehensive income (loss)	Dividends paid	Distributions to the U.S. Treasury		Transferred to/from surplus[5]	Transferred to/from surplus and change in accumulated other comprehensive income[6]
				Board expenditures	Costs of currency	Consumer Financial Protection Bureau and Office of Financial Research[3]			Statutory transfers[4]	Interest on Federal Reserve notes		
2018	112,861,657	47,353,636	-382,959	838,000	848,807	337,100	41,831	998,703	65,319,280	n/a	n/a	-3,175,000
2019	103,220,435	45,423,825	-169,458	814,000	836,975	518,600	148,923	713,931	54,892,569	n/a	n/a	0
2020	102,036,168	13,454,957	2,266,152	947,000	831,133	517,300	-1,275,509	386,312	86,890,110	n/a	n/a	0
Total 1914–2020	**1,961,103,747**	**276,973,707**	**41,021,946**	**13,047,117**	**18,447,472**	**4,869,377**	**-2,569,884**	**25,818,777**	**449,198,072**	**1,198,433,402**	**-4**	**12,767,389[7]**
Aggregate for each Bank, 1914–2020												
Boston	68,392,808	8,827,198	415,348	566,293	964,041	216,006	15,371	1,130,976	11,772,420	44,842,511	135	518,083
New York	909,786,643	131,598,026[8]	27,476,759	3,779,742	4,744,802	1,570,463	-2,747,278	7,315,810	235,705,652	545,077,826	-433	4,724,342
Philadelphia	60,340,306	8,981,468	860,275	770,039	838,315	301,067	12,368	1,771,429	11,831,153	36,308,189	291	411,507
Cleveland	78,708,404	8,598,449	854,893	994,373	1,067,569	385,326	23,628	1,930,148	16,099,870	49,612,575	-10	891,692
Richmond	140,422,978	20,243,201	2,656,023	2,528,561	1,583,191	1,037,842	51,211	5,203,690	28,737,141	81,295,580	-72	2,521,180
Atlanta	129,936,087	18,185,877	1,853,900	842,029	2,078,428	274,569	41,839	1,673,926	32,531,303	75,616,315	5	659,155
Chicago	154,180,037	19,218,923	1,972,322	818,702	1,867,604	164,014	17,325	1,519,274	22,088,217	109,806,844	12	683,716
St. Louis	45,283,553	5,449,841	443,759	209,944	635,126	54,419	27,368	403,676	7,598,407	31,149,772	-27	235,623
Minneapolis	25,134,449	5,201,699	434,934	217,421	360,838	28,174	8,781	464,493	3,653,323	15,436,029	65	211,534
Kansas City	50,262,967	7,760,110	600,008	230,350	644,157	49,125	-18,191	448,070	7,040,057	34,476,668	-9	194,396
Dallas	80,588,986	10,099,594	1,146,141	336,833	1,177,253	69,906	19,408	642,817	19,247,326	49,889,286	55	249,026
San Francisco	218,066,517	32,809,321	2,307,586	1,752,836	2,486,146	718,471	-21,711	3,314,467	52,893,206	124,921,807	-17	1,467,138
Total	**1,961,103,746**	**276,973,705**	**41,021,948**	**13,047,118**	**18,447,472**	**4,869,377**	**-2,569,883**	**25,818,777**	**449,198,072**	**1,198,433,402**	**-4**	**12,767,389**

Note: Components may not sum to totals because of rounding.

1 For 1987 and subsequent years, includes the cost of services provided to the Treasury by Federal Reserve Banks for which reimbursement was not received.

2 The Federal Reserve Bank of Boston is the primary beneficiary of MS Facilities LLC (Main Street Lending Program), and the Federal Reserve Bank of New York is the primary beneficiary of Commercial Paper Funding Facility LLC, Corporate Credit Facilities LLC, Municipal Liquidity Facility LLC, and Term Asset-Backed Loan Facility II LLC. As a result, the accounts and results of operations of those LLCs are included in the combined financial statements of the Federal Reserve Banks.

3 Starting in 2010, as required under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Board of Governors began assessing the Reserve Banks to fund the operations of the Consumer Financial Protection Bureau and, for a two-year period beginning July 21, 2010, the Office of Financial Research. These assessments are allocated to the Reserve Banks based on each Reserve Bank's capital and surplus balances as of the most recent quarter.

4 Represents transfers made as a franchise tax from 1917 through 1932; transfers made under section 13b of the Federal Reserve Act from 1935 through 1947; transfers made under section 7 of the Federal Reserve Act for 1996, 1997, and 2015–20.

5 Transfers made under section 13b of the Federal Reserve Act.

6 Transfers made under section 7 of the Federal Reserve Act. Beginning in 2006, accumulated other comprehensive income is reported as a component of surplus.

7 The $12,767,389 thousand transferred to surplus was reduced by direct charges of $500 thousand for charge-off on Bank premises (1927); $139,300 thousand for contributions to capital of the Federal Deposit Insurance Corporation (1934); $4 thousand net upon elimination of section 13b surplus (1958); $106,000 thousand (1996), $107,000 thousand (1997), and $3,752,000 thousand (2000) transferred to the Treasury as statutorily required; and $1,848,716 thousand related to the implementation of SFAS No. 158 (2006) and was increased by a transfer of $11,131 thousand from reserves for contingencies (1955), leaving a balance of $6,825,000 thousand on December 31, 2020.

8 This amount is reduced by $9,176,997 thousand for expenses of the System Retirement Plan. See note 4, "Table G.9. Income and expenses of the Federal Reserve Banks, by Bank, 2020."

n/a Not applicable.

(continued)

Table G.11. Operations in principal departments of the Federal Reserve Banks, 2017–20

Operation	2020	2019	2018	2017
Millions of pieces				
Currency processed	26,596	33,042r	34,312	32,942
Currency destroyed	2,043	5,140r	4,819	4,571
Coin received	33,994	56,101	56,012r	58,249r
Checks handled				
U.S. government checks[1]	83	52	53	56
Postal money orders	74	80	83	85
Commercial	3,767	4,389	4,740	5,153
Securities transfers[2]	21	19	17	16
Funds transfers[3]	184	168	158	153
Automated clearinghouse transactions				
Commercial	16,549	15,584	14,692	13,749
Government	1,878	1,704	1,668	1,629
Millions of dollars				
Currency processed	561,278	665,246r	659,126	644,395
Currency destroyed	30,514	84,254r	98,590	112,202
Coin received	3,294	5,408	5,387	5,585
Checks handled				
U.S. government checks[1]	205,905	149,337	148,149	145,599
Postal money orders	20,558	21,412	21,034r	20,682
Commercial	7,874,721	8,317,894	8,485,159	8,438,008
Securities transfers[2]	361,728,932	345,813,248	296,335,209	299,334,719
Funds transfers[3]	840,483,038	695,835,129	716,211,759	740,096,838
Automated clearinghouse transactions				
Commercial	31,446,232	28,081,631	25,860,072	23,398,576
Government	6,852,715	5,787,018	5,515,114	5,370,695

1 Includes government checks handled electronically (electronic checks).
2 Data on securities transfers do not include reversals.
3 Data on funds transfers do not include non-value transfers.
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Table G.12. Number and annual salaries of officers and employees of the Federal Reserve Banks, December 31, 2020

Federal Reserve Bank (including branches)	President	Other officers		Employees				Total	
	Annual salary (dollars)[1]	Number	Annual salaries (dollars)[1]	Number			Annual salaries (dollars)[1, 3]	Number	Annual salaries (dollars)[1, 3]
				Full time	Part time	Temporary/ hourly[2]			
Boston	450,500	104	28,184,720	976	14	9	123,653,608	1,104	152,288,828
New York	506,300	596	164,730,014	2,456	25	0	342,356,820	3,078	507,593,134
Philadelphia	435,100	75	17,514,175	791	10	27	87,796,452	904	105,745,727
Cleveland	428,500	77	18,128,550	958	16	18	98,080,527	1,070	116,637,577
Richmond	405,800	96	21,320,000	1,383	12	11	140,501,883	1,503	162,227,683
Atlanta	417,700	111	26,249,267	1,570	19	37	167,228,070	1,738	193,895,037
Chicago	450,500	144	35,954,504	1,438	29	0	170,064,771	1,612	206,469,775
St. Louis	404,200	101	24,172,700	1,306	17	9	133,541,504	1,434	158,118,404
Minneapolis	435,200	66	15,628,802	986	43	9	97,263,227	1,105	113,327,229
Kansas City	404,400	112	23,622,700	1,937	13	5	170,973,915	2,068	195,001,015
Dallas	440,700	81	18,724,492	1,202	14	16	115,392,329	1,314	134,557,521
San Francisco	482,900	115	31,164,430	1,663	17	37	205,489,973	1,833	237,137,303
Federal Reserve Information Technology	n/a	88	20,958,800	1,300	1	2	168,840,214	1,391	189,799,014
Office of Employee Benefits	n/a	17	4,880,300	45	1	0	6,162,460	63	11,042,760
Total	**5,261,800**	**1,783**	**451,233,454**	**18,011**	**231**	**180**	**2,027,345,753**	**20,217**	**2,483,841,007**

Note: Components may not sum to totals because of rounding.

1 Annual salary (excluding outside agency costs) based on salaries in effect on December 31, 2020.

2 Temporary/hourly employees are paid by the Bank, generally work less than 780 hours, and are employed on a temporary basis (such as interns).

3 Annual salary totals include pandemic premium pay for essential staff as a result of COVID-19.

n/a Not applicable.

Table G.13. Acquisition costs and net book value of the premises of the Federal Reserve Banks and Branches, December 31, 2020

Thousands of dollars

Federal Reserve Bank or Branch	Acquisition costs				Net book value	Other real estate
	Land	Buildings (including vaults)[1]	Building machinery and equipment	Total[2]		
Boston	27,293	210,456	48,616	286,365	100,504	n/a
New York	69,326	634,859	147,504	851,689	462,231	n/a
Philadelphia	8,146	179,801	50,775	238,722	134,359	n/a
Cleveland	4,219	162,292	40,014	206,525	106,423	n/a
Cincinnati	5,126	32,912	21,830	59,868	20,188	n/a
Richmond	32,524	185,309	67,103	284,936	124,648	n/a
Baltimore	7,917	43,911	16,112	67,940	27,645	n/a
Charlotte	7,884	46,560	17,581	72,025	32,343	n/a
Atlanta	25,185	165,513	25,523	216,221	128,549	n/a
Birmingham	5,347	13,283	3,144	21,774	11,301	n/a
Jacksonville	2,185	28,252	15,174	45,611	23,531	n/a
New Orleans	3,789	16,561	8,572	28,922	11,593	n/a
Miami	4,598	36,058	15,029	55,685	24,957	n/a
Chicago	7,460	258,344	44,478	310,282	117,086	n/a
Detroit	13,373	76,010	15,091	104,474	69,016	n/a
St. Louis	9,942	148,191	19,414	177,547	90,132	n/a
Memphis	2,472	18,799	6,734	28,005	7,021	n/a
Minneapolis	22,998	114,886	21,192	159,076	83,800	n/a
Helena	3,316	10,366	2,068	15,750	7,485	n/a
Kansas City	38,965	218,854	26,435	284,254	207,104	n/a
Denver	4,499	15,017	6,119	25,635	11,001	n/a
Omaha	4,727	12,960	3,289	20,976	12,447	n/a
Dallas	38,100	150,638	39,337	228,075	115,296	n/a
El Paso	262	6,207	3,596	10,065	3,904	n/a
Houston	32,323	104,845	9,604	146,772	99,566	n/a
San Francisco	20,988	151,515	38,155	210,658	86,067	n/a
Los Angeles	6,306	94,268	28,665	129,239	58,445	n/a
Salt Lake City	1,294	6,666	3,036	10,996	4,004	n/a
Seattle	13,101	50,282	5,829	69,212	48,476	n/a
Total	**423,665**	**3,193,615**	**750,019**	**4,367,299**	**2,229,122**	**n/a**

[1] Includes expenditures for construction at some offices, pending allocation to appropriate accounts.
[2] Excludes charge-offs of $17,699 thousand before 1952.
n/a Not applicable.

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