



# Federal Reserve Balance Sheet Developments

November 2021



## Federal Reserve Balance Sheet Actions and Activities

The Federal Reserve prepares this balance sheet report to help further its commitment to transparency about actions taken in connection with two of its key functions—conducting monetary policy to meet its congressional mandate of maximum employment and price stability as well as promoting financial stability. The report contains a snapshot of Federal Reserve actions and activity in managing its balance sheet, including

- an overview of [the Federal Reserve's balance sheet trends](#);
- a review of [changes in key Federal Reserve assets](#); and
- a review of [changes in key Federal Reserve liabilities](#).

### Box 1. Major Asset and Liability Categories on the Federal Reserve's Balance Sheet

Every Thursday, the Federal Reserve publishes data on its balance sheet. As of September 29, 2021, the Federal Reserve's balance sheet stood at nearly \$8.5 trillion. Securities holdings represented the vast majority of assets, while several liabilities were sizable.

Assets		Liabilities	
Treasury securities held outright	5,431	Deposits of depository institutions	4,095
Agency debt and mortgage-backed securities holdings	2,497	Federal Reserve notes in circulation	2,148
		Reverse repurchase agreements	1,702
		U.S. Treasury, General Account	174
Other assets	520	Capital and other liabilities	329
<b>Total</b>	<b>8,448</b>	<b>Total</b>	<b>8,448</b>

For more information on the Federal Reserve's balance sheet, see the weekly H.4.1 statistical release, "Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks," at <https://www.federalreserve.gov/releases/h41/> or the Federal Reserve Balance Sheet Developments page on the Board's website at <https://www.federalreserve.gov/monetarypolicy/balance-sheet-developments-report.htm>.

## Balance Sheet Role in Meeting the Federal Reserve Monetary Policy Mandate

The Federal Reserve conducts U.S. monetary policy in accordance with its mandate from Congress: to promote maximum employment and stable prices in the U.S. economy. Because smooth financial market functioning aids with the transmission of monetary policy, the Federal Reserve monitors financial stability risks and takes appropriate actions to help ensure that financial institutions and financial markets can efficiently channel the flow of credit to households, communities, and businesses. Many of the actions the Federal Reserve takes for monetary policy and financial stability purposes are reflected on the balance sheet.

The Federal Reserve considers transparency about the goals, conduct, and stance of monetary policy to be fundamental to the effectiveness of monetary policy. Transparency about monetary policy also helps promote the accountability of the Federal Reserve to Congress and the public. As a result, and in accordance with the Federal Reserve Act, the Federal Reserve publishes each week the [H.4.1 statistical release, “Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks.”](#) [Box 1](#) provides a high-level snapshot of the balance sheet as of September 29, 2021.<sup>1</sup>

## General Balance Sheet Trends

In the first three quarters of 2021, as the U.S. economy made progress in recovering from the effects of the COVID-19 pandemic, the Federal Reserve evaluated and adjusted, as needed, its various policy tools. Usage declined on a wide array of emergency programs that supported lending to households, businesses, nonprofits, and state and local governments. In addition, the Federal Reserve continued to increase its holdings of Treasury and agency mortgage-backed securities (MBS) as part of its monetary policy actions to foster smooth market functioning and accommodative financial conditions, thereby supporting the flow of credit to households and businesses.

Overall, as shown in [table 1](#), the size of the Federal Reserve’s balance sheet increased from about \$7.4 trillion at the end of 2020 to nearly \$8.5 trillion as of September 29, 2021. On the asset side of the balance sheet, this increase was concentrated in securities held outright. These holdings rose by \$1.2 trillion as the Federal Reserve continued its monthly net purchases of \$80 billion in Treasury securities and \$40 billion in agency MBS.

Many of the Federal Reserve’s holdings of other assets decreased over the first three quarters of 2021. Most of the funding, credit, and liquidity facilities that supported the U.S. economy through

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<sup>1</sup> See the Federal Reserve’s website at <https://www.federalreserve.gov/releases/h41/>.

<b>Table 1. Assets, liabilities, and capital of the Federal Reserve System</b>			
<b>(\$ billions)</b>			
Item	December 30, 2020	September 29, 2021	Change from December 2020
<b>Total assets</b>	<b>7,363</b>	<b>8,448</b>	<b>1,085</b>
Securities held outright	6,731	7,928	1,197
U.S. Treasury securities	4,689	5,431	742
Federal agency debt securities	2	2	0
Agency mortgage-backed securities	2,039	2,495	456
Repurchase agreements	1	0	-1
Foreign official	0	0	0
Other	1	0	-1
Loans	57	61	4
Discount window	2	1	-1
Primary Dealer Credit Facility	0	0	0
Money Market Mutual Fund Liquidity Facility	4	0	-4
Paycheck Protection Program Liquidity Facility	51	61	10
Other loans	0	0	0
Net portfolio holdings of Commercial Paper Funding Facility II LLC	9	0	-9
Net portfolio holdings of Corporate Credit Facility LLC	47	1	-46
Net portfolio holdings of Main Street Facilities LLC	54	30	-24
Net portfolio holdings of Municipal Liquidity Facility LLC	21	10	-11
Net portfolio holdings of Term Asset-Backed Securities Loan Facility II LLC	13	5	-8
Central bank liquidity swaps	18	0	-18
Other assets	414	413	-1
<b>Total liabilities</b>	<b>7,324</b>	<b>8,408</b>	<b>1,084</b>
Federal Reserve notes	2,038	2,148	110
Deposits held by depository institutions other than term deposits	3,143	4,095	952
Reverse repurchase agreements	210	1,702	1,492
Foreign official and international accounts	209	287	78
Others	1	1,416	1,415
U.S. Treasury, General Account	1,614	174	-1,440
Treasury contributions to credit facilities	114	26	-88
Other liabilities	206	263	57
<b>Total capital</b>	<b>39</b>	<b>40</b>	<b>1</b>
Note: Rounded to billions. Source: Federal Reserve Board.			

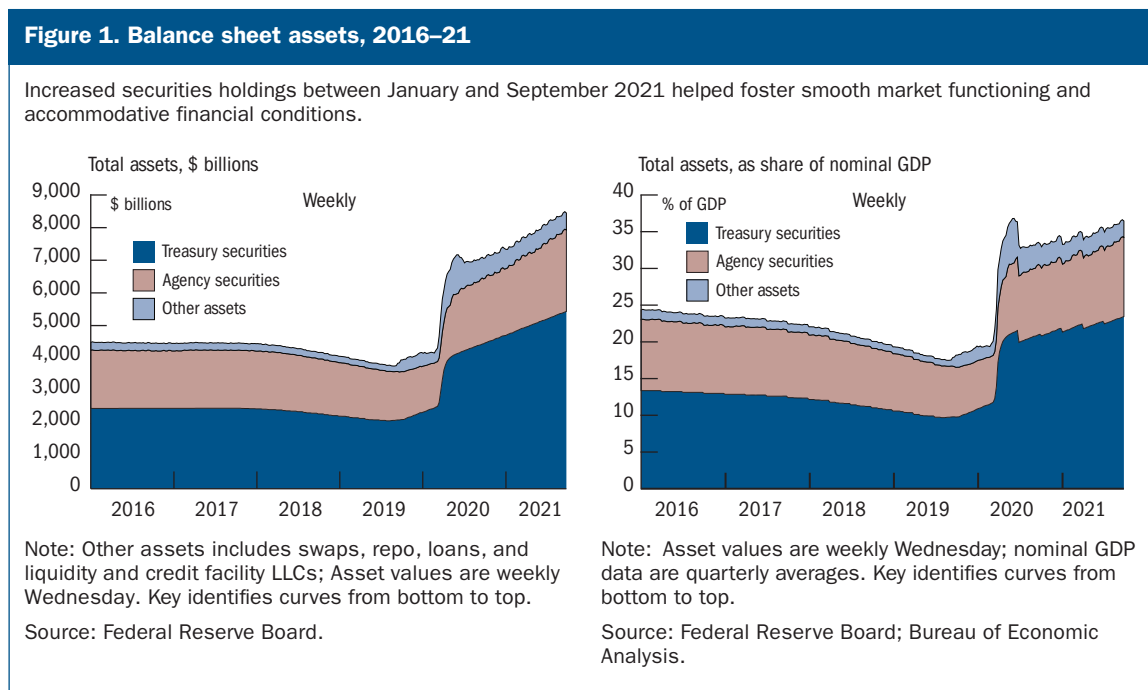
the most difficult part of the pandemic were closed between the end of 2020 and the first quarter of 2021. The majority of these facilities saw declines in their outstanding balances as their underlying assets matured, prepaid, or were sold over the first nine months of 2021. In addition, draws

on central bank liquidity swap lines decreased to near zero as dollar funding markets stabilized over this period.

On the liability side of the Federal Reserve’s balance sheet, reserve balances increased about \$950 billion, to about \$4.1 trillion, remaining the largest liability. The increase in reserve balances was driven both by the expansion of the size of the balance sheet associated with the Federal Reserve’s asset purchases and the Treasury’s large drawdown in balances held in its Treasury General Account (TGA) that more than offset the substantial increase in take-up at the Federal Reserve’s overnight reverse repurchase agreement (ON RRP) facility. The combination of the expansion of reserve balances and a sizable decline in Treasury bills outstanding contributed to downward pressures on money market rates. In this environment, take-up at the ON RRP facility rose by about \$1.4 trillion. Usage of this facility grew from a very limited amount at the end of 2020 to the peak on September 29, 2021, consistent with the facility’s intended purpose of helping to provide a floor under short-term interest rates. Finally, \$88 billion of the Treasury’s equity contributions to the facilities established under the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was returned.

## Changes in Federal Reserve Assets

As shown in [figure 1](#), total assets on the Federal Reserve’s balance sheet rose about \$1.1 trillion over the first three quarters of 2021, to stand at nearly \$8.5 trillion or 37 percent of the level of



gross domestic product (GDP). The increase in total assets was more than accounted for by total securities held outright, which rose about \$1.2 trillion reflecting the continued net purchases of Treasury securities and agency MBS directed by the Federal Open Market Committee (FOMC).

In contrast to the rise in securities holdings, outstanding balances at most of the Federal Reserve's funding, credit, and liquidity facilities established under section 13(3) of the Federal Reserve Act declined over this period. Table 2 reports, for each facility, its opening and closing dates, the peak dollar amount of assets, and the amount of assets and Treasury equity contribution as of September 29, 2021. As shown, all facilities backed by CARES Act funding (Corporate Credit Facility (CCF), Municipal Liquidity Facility (MLF), Term Asset-Backed Securities Loan Facility (TALF), Main Street Lending Program (MSLP)) were closed around the end of 2020. The Primary Dealer Credit Facility (PDCF), Money Market Mutual Fund Liquidity Facility (MMLF), and Commercial Paper Funding Facility (CPFF) were closed at the end of March 2021. The Paycheck Protection Program Liquidity Facility (PPPLF) remained open through the end of July 2021 to support the extension of loans through the Paycheck Protection Program (PPP). After closure, outstanding balances in these facilities declined as proceeds were realized from the loans and purchased assets, and, for the case of the PPPLF, as the Small Business Association (SBA) disbursed PPP forgiveness payments. Treasury's equity contributions were returned as balances declined. Four of the facilities (PDCF, MMLF, CPFF, CCF) had zero outstanding amounts of asset purchases as of September 29. All but one of the other facilities saw declines in their balances. The PPPLF program, which saw its

**Table 2. Summary of funding, credit, and liquidity facilities established under section 13(3) of the Federal Reserve Act**

\$ billions

Facility	Announced	Closed	Peak amount of assets	Outstanding amount of facility asset purchases/loans extended <sup>1</sup>	Treasury equity/credit protection remaining <sup>2</sup>
Primary Dealer Credit Facility (PDCF)	3/17/2020	3/31/2021	33.40	-	n/a
Money Market Mutual Fund Liquidity Facility (MMLF)	3/18/2020	3/31/2021	53.20	-	-
Commercial Paper Funding Facility (CPFF)	3/17/2020	3/31/2021	4.20	-	-
Paycheck Protection Program Liquidity Facility (PPPLF)	4/9/2020	7/30/2021	90.60	60.80	n/a
Corporate Credit Facility (CCF)	4/9/2020	12/31/2020	14.10	-	-
Municipal Liquidity Facility (MLF)	4/9/2020	12/31/2020	6.40	4.40	6.30
Term Asset-Backed Securities Loan Facility (TALF)	4/9/2020	12/31/2020	4.10	1.50	3.50
Main Street Lending Program (MSLP)	4/9/2020	1/8/2021	16.60	13.40	16.60

n/a Not applicable.

<sup>1</sup> The outstanding amount of credit facility asset purchases (applicable to CPFF, CCF, MLF, TALF, and MSLP, net of allowance for loan loss) or loans extended (applicable to PDCF, MMLF, and PPPLF) at September 29, 2021.

<sup>2</sup> The remaining amount of Treasury contribution to the credit facilities at September 29, 2021.

outstanding balance increase to a peak of about \$91 billion over the first six months of 2021, declined a bit in the third quarter to stand at \$61 billion on September 29, 2021.

Key points on the status of these facilities:

- **Primary Dealer Credit Facility:** The facility had zero holdings at the start of 2021 and, on March 31, 2021, the PDCF was closed. See the Board’s website for [more information on the facility](#).
- **Money Market Mutual Fund Liquidity Facility:** The facility saw no usage since the spring of 2020, and on March 31, 2021, the MMLF was closed. The Treasury’s \$1.5 billion of credit protection to the MMLF was returned on April 12, 2021. See the Board’s website for [more information on the facility](#).
- **Commercial Paper Funding Facility:** All commercial paper issued to the facility matured in 2020 with full repayment. The CPFF was closed on March 31, 2021. The \$10 billion Treasury equity contribution was returned on June 29, 2021. See the Board’s website for [more information on the facility](#).
- **Paycheck Protection Program Liquidity Facility:** In January 2021, after Congress gave additional funding to the PPP and new PPP lending resumed, PPPLF advances outstanding began to increase. The PPPLF was the most heavily used of the emergency lending facilities established by the Federal Reserve to support the continued flow of credit to households, businesses, and state and local governments during the pandemic. Over the first half of 2021, the outstanding balance of the facility increased by roughly \$40 billion to hit a peak of \$91 billion at the end of June. The facility was closed at the end of July. Driven by a combination of voluntary prepayments by PPPLF borrowers and SBA forgiveness payments on PPP loans, the outstanding balance subsequently declined to \$61 billion by September 29, 2021. Details of the facility’s usage are reported in [box 2](#); see the Board’s website for [more information on the facility](#).
- **The Corporate Credit Facilities:** The Federal Reserve Board authorized two facilities to support credit to large employers—the Primary Market Corporate Credit Facility (PMCCF) for new bond and loan issuance and the Secondary Market Corporate Credit Facility (SMCCF) to provide liquidity for outstanding corporate bonds. See the Board’s website for more information on [the PMCCF](#) and [the SMCCF](#).
  - The PMCCF did not execute any purchases during the period it was operational, which ended December 31, 2020.
  - As of December 31, 2020, the SMCCF no longer purchased assets.
  - The SMCCF began a gradual and orderly sale of its holdings of corporate bond exchange-traded funds (ETFs) in June 2021 and of its holdings of corporate bonds in July 2021. The SMCCF completed sales of its holdings at the end of August 2021.

- Excess Treasury equity from the Corporate Credit Facility LLC of \$23.6 billion was returned to the Treasury on January 5, 2021. The remaining equity investment was returned on September 24, 2021.
- **Municipal Liquidity Facility:** After closing the window for new loan applications on December 1, 2020, and terminating lending activity on December 31, 2020, excess Treasury capital was returned on January 5, 2021. As of September 29, 2021, the outstanding asset balance of the facility was about \$10 billion, with approximately \$4.4 billion in loans and \$6.3 billion in Treasury equity capital. The underlying assets are expected to mature by December 2023. See the Board's website for [more information on the facility](#).
- **Term Asset-Backed Securities Loan Facility:** As of December 31, 2020, the TALF was closed for new loan extensions, and on January 4, 2021, the Treasury's equity investment was reduced to \$3.5 billion. Reflecting rapid prepayments, outstanding loans held in the facility dropped to total a bit under \$1.5 billion as of September 29, 2021. The last of the underlying assets are expected to mature by December 2023. See the Board's website for [more information on the facility](#).
- **Main Street Lending Program:** The MSLP was closed at the end of December 2020. In order to allow more time to process and fund loans that were submitted to the MSLP lender portal on or before December 14, 2020, the Board extended the termination date from December 31 to January 8, 2021. On January 8, 2021, the MSLP returned \$20.9 billion of equity to the Treasury. As of September 29, 2021, the MSLP had \$13.4 billion in outstanding loans, net of an allowance for loan losses.<sup>2</sup> The facility will be in place until the underlying assets mature or are sold. See the Board's website for [more information on the facility](#).

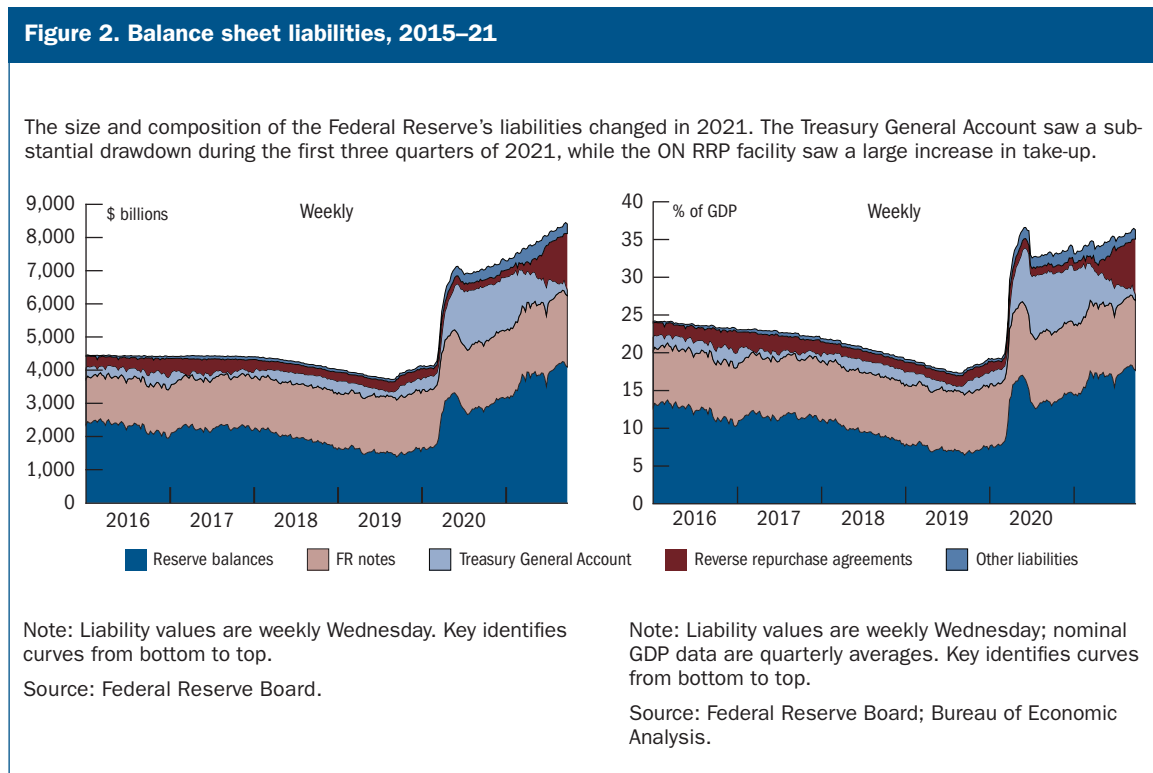
Draws on central bank liquidity swap lines decreased to near zero as dollar funding markets stabilized over the first half of 2021 and remained near zero in the third quarter. Usage of repurchase operations remained at zero since February. At the June 2021 FOMC meeting, the FOMC extended the temporary swap lines through the end of 2021. At the July FOMC meeting, the FOMC formally established a standing repurchase agreement facility for domestic institutions and a foreign and international monetary authorities repo facility for foreign official institutions; these facilities did not receive take-up over the subsequent month. More information about these facilities is available at <https://www.federalreserve.gov/monetarypolicy/policytools.htm>.

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<sup>2</sup> The MSLP's allowance for loan losses consists of specific allowances for impaired loan participations and a general allowance for all other loan participations and collectively reflects management's estimate of probable loan losses inherent in the loan portfolio at the reporting date. The MSLP quarterly performs a comprehensive review of the allowance for loan losses, most recently as of June 30, 2021. The evaluation of loan participations purchased resulted in recognizing a loan loss allowance in the amount of \$2.5 billion.

## Changes in Federal Reserve Liabilities

The Federal Reserve's liabilities expanded from December 31, 2020, to September 29, 2021. The expansion in Federal Reserve liabilities was the counterpart of the increase in Federal Reserve assets. As shown in [figure 2](#), total liabilities on the Federal Reserve's balance sheet rose to stand at \$8.4 trillion on September 29, 2021. Reserve balances, Federal Reserve Notes, and take-up in the Federal Reserve's ON RRP facility all grew, while the TGA balance recorded a noticeable decline.



For the first three months of 2021, on net, reserve balances rose about \$950 billion to stand at nearly \$4.1 trillion on September 29, 2021. Reserve balances as a share of Federal Reserve liabilities stood at roughly 50 percent (and about 18 percent as a ratio of nominal GDP). Reserve balances increased as asset purchases were settled and the TGA declined over this period. The increase in reserve balances was also moderated by the large increase in take-up of the ON RRP facility that started in April.

The TGA saw a substantial drawdown from December 31, 2020, to September 29, 2021. After coming into January at an elevated level, the TGA dropped by more than \$1.4 trillion over the first nine months of the year first reflecting pandemic-related fiscal stimulus payments and tax refunds



and then in response to the Treasury's actions related to the reinstatement of the debt limit. The TGA stood at about \$175 billion on September 29, 2021.

Against a backdrop of low short-term market interest rates and ample liquidity, the use of the ON RRP facility increased substantially over the first three quarters of 2021 and reached a high of \$1.7 trillion at the end of September, compared with usage near zero in February. Factors contributing to this increase included the decline in Treasury bill supply, downward pressure on money market rates, and the mid-June technical adjustment to the Federal Reserve's administered rates. Participation over this period was primarily from government money market funds. In light of the potential for expanded use of the facility and given growth in money market fund assets under management in recent years, the FOMC raised the per-counterparty limit twice during this period, with the ON RRP per-counterparty limit set at \$160 billion per day in September, up from \$30 billion at the March 2021 FOMC meeting.

Reflecting the winding down of many of the of funding, credit, and liquidity facilities, the Federal Reserve returned \$88 billion of the associated equity contributions by the U.S. Treasury over the first three quarters of 2021. As of September 29, the Federal Reserve held \$26 billion in remaining Treasury equity contributions.

## Box 2. The Paycheck Protection Program Liquidity Facility

The Paycheck Protection Program Liquidity Facility (PPPLF) was established at the outset of the COVID-19 pandemic in April 2020 as an emergency lending program, under section 13(3) of the Federal Reserve Act.<sup>1</sup> It was designed to bolster the effectiveness of the Small Business Administration's (SBA) Paycheck Protection Program (PPP), which was established by the CARES Act in April 2020 to provide payroll support to small businesses and was expanded with legislation that provided for additional PPP lending in 2021.<sup>2</sup> PPPLF advances were made to eligible financial institutions that originated PPP loans, using the PPP loans as collateral at face value.

Looking across the Federal Reserve's emergency lending facilities, the PPPLF was the most heavily used. It was established to support the flow of credit to households and businesses during the COVID-19 pandemic.<sup>3</sup> Total PPPLF advances were a small fraction of total PPP lending (which totaled \$800 billion), but it reached a broad swath of PPP lenders. More than 880 PPP lenders—from all 50 states and the District of Columbia, including almost 80 nonbanks—used the PPPLF during the life of the facility.

*(continued on next page)*

<sup>1</sup> Board of Governors of the Federal Reserve System, "Federal Reserve Takes Additional Actions to Provide Up to \$2.3 Trillion in Loans to Support the Economy," news release, April 9, 2020, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm>.

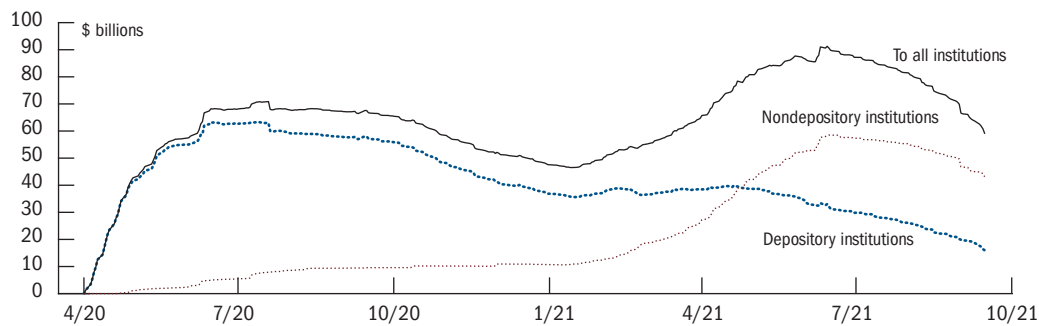
<sup>2</sup> For further background information regarding the PPP, please visit <https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program>. The PPPLF supplied liquidity to SBA-approved PPP lenders in order to increase those lenders' capacity and confidence to make PPP loans.

<sup>3</sup> More information on the other Federal Reserve facilities is available on the Board's website at <https://www.federalreserve.gov/funding-credit-liquidity-and-loan-facilities.htm>.

## Box 2. The Paycheck Protection Program Liquidity Facility—*continued*

As shown in figure A, the dollar volume of PPPLF advances outstanding rose sharply following the facility's establishment and reached an initial peak of more than \$70 billion in early August 2020. Outstanding advance volumes then gradually declined as new PPP lending stopped after the program's initial closure and as some PPPLF participants prepaid their advances. Advances outstanding declined more steeply later in 2020 as the SBA began making forgiveness payments on PPP loans.<sup>4</sup>

**Figure A. PPPLF advances outstanding, by borrower type**



Source: Federal Reserve Bank of Minneapolis, Paycheck Protection Program Lending Facilities data (PPPLF).

Shortly after the PPP was re-opened for additional lending in January 2021, outstanding PPPLF advances began increasing again, albeit at a more moderate pace compared with the program's inception. Outstanding advances reached their second peak of more than \$91 billion in late June 2021 across more than 300 borrowers, with roughly two-thirds of those advances extended to nonbanks.

Following the first peak in August 2020, PPPLF advances outstanding to banks—the dashed line in figure A—declined on net. In contrast, PPPLF advances to nonbanks—the dotted line—continued to increase through the latter half of 2020, even while there was no new PPP lending, and accelerated following the resumption of PPP lending activity in early 2021. The decline in outstanding advances since the PPPLF's closure in July 2021 has been driven by a combination of voluntary prepayments by PPPLF borrowers and PPP forgiveness payments from the SBA.<sup>5</sup>

The PPPLF provided important support to mission-oriented community development financial institutions (CDFIs), minority depository institutions (MDIs), and other small banks that lend to small businesses. Among banks that participated during the life of the facility, community banks (those with \$10 billion or less in total assets) received more than 90 percent of the total advances extended by the PPPLF.<sup>6</sup> Moreover, roughly 100 CDFIs and MDIs, which provide financial services to economically underserved communities, borrowed from the PPPLF.

<sup>4</sup> When payments (including forgiveness payments) are made on pledged PPP loans, PPPLF participants are obligated to pay down the associated PPPLF advances extended by the Federal Reserve.

<sup>5</sup> As of early October 2021, the SBA had forgiven approximately \$560 billion in total PPP loans, a portion of which were used as collateral in PPPLF lending; more information is available at [https://www.sba.gov/sites/default/files/2021-10/2021.10.03\\_Weekly%20Forgiveness%20Report\\_Public-508.pdf](https://www.sba.gov/sites/default/files/2021-10/2021.10.03_Weekly%20Forgiveness%20Report_Public-508.pdf).

<sup>6</sup> This statistic is based on the count of advances extended, in contrast to dollar volumes.