



Quarterly Report on Federal Reserve Balance Sheet Developments

November 2015

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Purpose

The Federal Reserve prepares this quarterly report as part of its efforts to enhance transparency about its balance sheet, financial information, and monetary policy tools, and to ensure appropriate accountability to the Congress and the public.

The appendix of this report contains information about the transparency provisions of the Dodd-

Note: Financial information in this report has not been audited. Financial data are audited annually and are available at www .federalreserve.gov/monetarypolicy/bst_fedfinancials.htm.

Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) and the Federal Reserve's efforts to meet the requirements of those provisions.

For prior editions of this report (which was published from June 2009 to August 2012 as the "Monthly Report on Credit and Liquidity Programs and the Balance Sheet") and other resources, please visit the Board's public website at www.federalreserve.gov/monetarypolicy/clbsreports.htm.

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Abbreviations

CAMELS	Capital, Assets, Management, Earn-	MBS	Mortgage-backed securities
	ings, Liquidity, and Sensitivity	OIS	Overnight index swap
CMO	Collateralized mortgage obligations	OMO	Open market operation
FCB	Foreign central bank	RRP	Reverse repurchase agreement
FOMC	Federal Open Market Committee	SOMA	System Open Market Account
FRBNY	Federal Reserve Bank of New York	TAF	Term Auction Facility
GSE	Government-sponsored enterprise	TDF	Term Deposit Facility
LLC	Limited liability company		1
LSAP	Large-scale asset purchase program		

Overview

Recent Developments

The Overview section of this report highlights recent developments in the operations of the Federal Reserve's monetary policy tools and presents data describing changes in the assets, liabilities, and total capital of the Federal Reserve System as of October 28, 2015.

Federal Reserve Board Publishes Quarterly Financial Statements

 On November 20, 2015, the Federal Reserve Board published the "Federal Reserve Banks Combined Quarterly Financial Report" for the third quarter of 2015, which includes summary information on the combined financial position and results of operations of the 12 Reserve Banks and Maiden Lane LLC. All financial information included in the report is unaudited. The report is available on the Federal Reserve Board's website at www .federalreserve.gov/monetarypolicy/bst_fedfinancials.htm#quarterly.

Federal Reserve System Selected Assets, Liabilities, and Total Capital

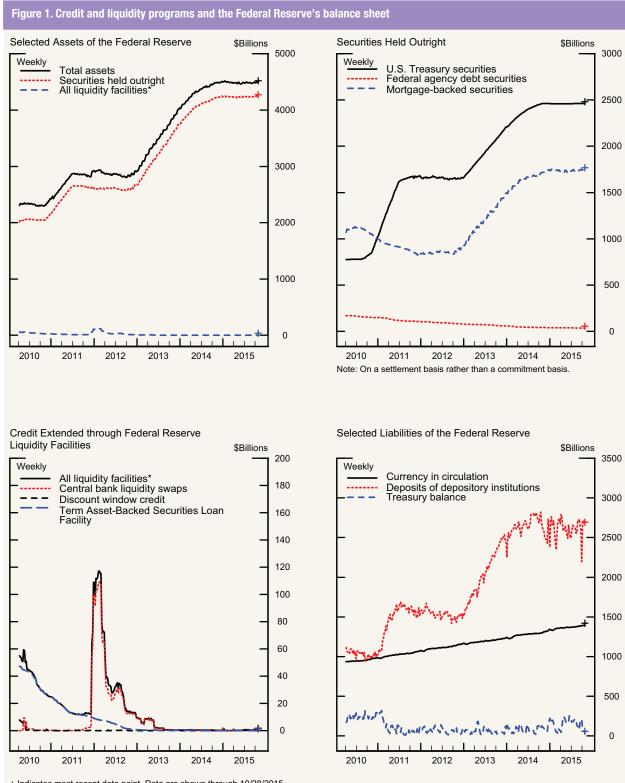
Table 1 reports selected assets and liabilities and total capital of the Federal Reserve System and presents the change in these components over selected intervals. The Federal Reserve publishes its complete balance sheet each week in the H.4.1 statistical release, "Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks," available at www.federalreserve.gov/releases/h41/.

Figure 1 displays the levels of selected Federal Reserve assets and liabilities, securities holdings, and credit extended through liquidity facilities since April 2010.

Item	Current October 28, 2015	Change from July 29, 2015	Change from October 29, 2014
Total assets	4,489	+4	+3
Selected assets			
Securities held outright	4,240	+9	+21
U.S. Treasury securities ¹	2,462	+*	+*
Federal agency debt securities ¹	34	-1	-6
Mortgage-backed securities ²	1,744	+9	+26
Memo: Overnight securities lending ³	14	+4	+4
Memo: Net commitments to purchase mortgage-backed securities ⁴	23	-6	-24
Unamortized premiums on securities held outright ⁵	192	-4	-17
Unamortized discounts on securities held outright ⁵	-17	+1	+2
Lending to depository institutions ⁶	*	_*	_*
Central bank liquidity swaps ⁷	*	_*	+*
Net portfolio holdings of Maiden Lane LLC ⁸	2	+*	+*
Foreign currency denominated assets ⁹	20	+*	-3
Total liabilities	4,431	+4	+*
Selected liabilities			
Federal Reserve notes in circulation	1,350	+22	+95
Reverse repurchase agreements ¹⁰	345	+102	+108
Foreign official and international accounts ¹⁰	189	+33	+87
Others ¹⁰	155	+69	+21
Term deposits held by depository institutions	0	0	-172
Other deposits held by depository institutions	2,668	+35	+41
U.S. Treasury, general account	36	-168	-83
Other deposits ¹¹	20	+12	+12
Total capital	59	+*	+2

Note: Unaudited. Components may not sum to totals because of rounding.

- * Less than \$500 million.
- ¹ Face value.
- ² Guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae. The current face value shown is the remaining principal balance of the securities.
- 3 Securities loans under the overnight facility are off-balance-sheet transactions. These loans are shown here as a memo item to indicate the portion of securities held outright that have been lent through this program.
- ⁴ Current face value. Includes commitments associated with outright purchases, dollar rolls, and coupon swaps.
- ⁵ 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. For U.S. Treasury and federal agency debt securities, amortization is on a straight-line basis. For mortgage-backed securities, amortization is on an effective-interest basis.
- ⁶ Total of primary, secondary, and seasonal credit.
- Dollar value of the 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 Fair value, reflecting values as of September 30, 2015. Fair value reflects an estimate of the price that would be received upon selling an asset if the transaction were to be conducted in an orderly market on the measurement date. Fair values are updated quarterly.
- 9 Revalued daily at current foreign currency exchange rates.
- 10 Cash value of agreements, which are collateralized by U.S. Treasury securities, federal agency debt securities, and mortgage-backed securities.
- 11 Includes deposits held at the Reserve Banks by international and multilateral organizations, government-sponsored enterprises, and designated financial market utilities.



⁺ Indicates most recent data point. Data are shown through 10/28/2015.

* All liquidity facilities includes primary credit, secondary credit, seasonal credit, Term Asset-Backed Securities Loan Facility, and central bank liquidity swaps.

Monetary Policy Tools

The Federal Reserve currently uses several tools to implement monetary policy in support of its statutory mandate to foster maximum employment and stable prices.

The Federal Reserve conducts open market operations (OMOs) in domestic markets. OMOs can be permanent, including the outright purchase and sale of Treasury securities, government-sponsored enterprise (GSE) debt securities, and federal agency and GSE mortgage-backed securities (MBS); or temporary, including the purchase of these securities under agreements to resell, and the sale of these securities under agreements to repurchase. The authority to conduct OMOs is granted under Section 14 of the Federal Reserve Act, and the range of securities that the Federal Reserve is authorized to purchase and sell is relatively limited. OMOs are conducted by the Federal Reserve Bank of New York (FRBNY) Trading Desk, which acts as agent for the Federal Open Market Committee (FOMC). The FRBNY's traditional counterparties for OMOs are the primary dealers with which the FRBNY trades U.S. government and select other securities. Since 2009, the FRBNY has designated other counterparties for certain OMO programs.

OMOs have been used historically to adjust the supply of reserve balances so as to keep the federal funds rate around the target federal funds rate established by the FOMC. In recent years, the Federal Reserve has also developed other tools to strengthen its control of short-term interest rates and to reduce the

large quantity of reserves held by the banking system when needed.

The Federal Reserve provides short-term liquidity to domestic banks and other depository institutions through the discount window. In addition, because of the global nature of bank funding markets, the Federal Reserve has established liquidity arrangements with foreign central banks as part of coordinated international efforts.

Permanent Open Market Operations

Recent Developments

- Between July 29, 2015, and October 28, 2015, the System Open Market Account's (SOMA's) holdings of Treasury securities were little changed as a result of the FOMC's policy of rolling over maturing Treasury securities at auction.
- The SOMA's holdings of agency debt declined between July 29, 2015, and October 28, 2015, because of bond maturities. Holdings of agency MBS increased principally because of the timing difference between agency MBS principal paydowns and settlement of the reinvestment of principal payments from agency debt and agency MBS into agency MBS under the FOMC's reinvestment program announced on September 21, 2011.

Background

Permanent OMOs are outright purchases or sales of securities for the SOMA, the Federal Reserve's portfolio. Traditionally, permanent OMOs have been used to accommodate the longer-term factors driving the expansion of the Federal Reserve's balance sheet, principally the trend growth of currency in circulation. More recently, the expansion of SOMA securities holdings has been driven by large-scale asset pur-

A current list of primary dealers is available on the FRBNY's website at www.newyorkfed.org/markets/pridealers_current .html. Information on the FRBNY's administration of its relationships with primary dealers—including requirements for business standards, financial condition and supervision, and compliance and controls—is available at www.newyorkfed.org/markets/pridealers_policies.html and www.newyorkfed.org/markets/pridealers_faq_100111.html.

Table 2.	Domestic	SOMA	securit	ies ho	ldings
Billions of	dollars				

Security type	Total par value as of October 28, 2015	Total par value as of July 29, 2015
U.S. Treasury bills	0	0
U.S. Treasury notes and bonds, nominal	2,347	2,347
U.S. Treasury floating rate notes	*	*
U.S. Treasury notes and bonds, inflation-indexed ¹	115	115
Federal agency debt securities ²	34	35
MBS ³	1,744	1,735
Total SOMA securities holdings	4,240	4,231

Note: Unaudited. Components may not sum to total because of rounding. Does not include investments denominated in foreign currencies or unsettled transactions.

- * Less than \$500 million.
- ¹ Includes inflation compensation.
- Direct obligations of Fannie Mae, Freddie Mac, and the Federal Home Loan Banks.
- ³ Guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae. Current face value of the securities, which is the remaining principal balance of the securities.

chase programs (LSAPs), which are described in more detail below. In 2011 and 2012, permanent open market operations were also used to extend the average maturity of securities held in the SOMA.²

The composition of the SOMA is presented in table 2. The Federal Reserve's outright holdings of securities are reported weekly in tables 1, 2, 3, 5, and 6 of the H.4.1 statistical release.

On September 28, 2012, the Federal Reserve began the regular publication of transaction-level information on individual open market transactions. In accordance with the Dodd-Frank Act, this information will be made available on a quarterly basis and with an approximately two-year lag. The transaction-level detail supplements the extensive aggregate information the Federal Reserve has previously provided in weekly, monthly, and quarterly reports, and is available at www.newyorkfed.org/markets/OMO_transaction_data.html.

On February 20, 2013, the FRBNY announced the introduction of a pilot program for a few small broker—dealers to participate in FRBNY operations to conduct outright purchases or sales of U.S. Treasury securities along with primary dealers. Four firms participated in the pilot program. These new counterparties were not eligible to participate in other types

of OMOs. The program ran for about one year—a period long enough for the FRBNY to evaluate the benefits and costs of a wider range of participants in its SOMA operations—and concluded on July 31, 2014.

On August 5, 2014, the FRBNY announced the introduction of a similar pilot program for a few small broker-dealers to act as new counterparties in its agency MBS market operations. Pilot program participants will participate in FRBNY operations to conduct secondary market outright purchases or sales of agency MBS along with primary dealers. The program will run for about one year. The FRBNY's intent in conducting these pilot programs is to explore ways to broaden access to monetary policy operations, and to determine the extent to which additional counterparties beyond the primary dealers can augment the FRBNY's operational capacity and resiliency in its monetary policy operations.

Large-Scale Asset Purchase Programs

From March 2009 through March 2010, the Federal Reserve purchased direct obligations of the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), and the Federal Home Loan Banks; MBS guaranteed by Fannie Mae, Freddie Mac, and the Government National Mortgage Association (Ginnie Mae); and longer-term Treasury securities. More information on these actions is available at www.federalreserve.gov/monetarypolicy/bst_openmarketops.htm.

In November 2010, the FOMC decided to expand its holdings of securities and announced that in order to promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the FOMC intended to purchase a further \$600 billion of longer-term Treasury securities by the end of the second quarter of 2011. The last purchase under this program occurred in June 2011.

In August 2010, the FOMC announced that it would reinvest principal payments from agency debt and agency MBS in longer-term Treasury securities in order to maintain domestic securities holdings in the SOMA portfolio at the level intended under the LSAPs. In September 2011, the FOMC announced

Information on the maturity extension program is available at www.federalreserve.gov/monetarypolicy/ maturityextensionprogram.htm and www.newyorkfed.org/ markets/opolicy/operating_policy_110921.html.

The settlement of all remaining outstanding MBS from these purchases was completed in August 2010.

that it would begin reinvesting these principal payments in agency MBS.

On September 13, 2012, the FOMC announced that it would increase policy accommodation by purchasing additional agency MBS at a pace of \$40 billion per month. On December 12, 2012, the FOMC announced that it would continue these purchases and that it would begin purchasing longer-term Treasury securities following the completion of its maturity extension program (described above), initially at a pace of \$45 billion per month. In addition, the FOMC decided to resume rolling over maturing Treasury securities at auction. More information is available on the Federal Reserve Board's website at www.federalreserve.gov/newsevents/press/monetary/20120913a.htm and www.federalreserve.gov/newsevents/press/monetary/20121212a.htm.

On December 18, 2013, the FOMC announced that in light of cumulative progress toward maximum employment and improvement in the outlook for labor market conditions, it would modestly slow the pace of its additional MBS and longer-term Treasury securities purchases, and it would likely further reduce the pace of asset purchases in measured steps if incoming information broadly supported its expectation of ongoing improvement in labor market conditions and inflation moving back toward its 2 percent longer-run objective. At subsequent meetings, the FOMC made further measured reductions in the pace of asset purchases.

On October 29, 2014, the FOMC announced that it had decided to conclude its asset purchase program, and that it would maintain its existing policy of reinvesting principal payments from its holdings of agency debt and MBS in agency MBS and of rolling over maturing Treasury securities at auction. Additional information is available in the FOMC statements from December 2013 through October 2014 at www.federalreserve.gov/monetarypolicy/fomccalendars.htm.

Temporary Open Market Operations and Other Reserve Management Tools

Recent Developments

 The FRBNY has been authorized by the FOMC to conduct a series of term reverse repurchase agreement (reverse repo or RRP) operations to span each quarter-end through January 2016. Two such operations were conducted in late September spanning the end of the third quarter of 2015. Additional information is available at www.newyorkfed.org/markets/rrp_op_policies.html, and the results of the operations are available at www.newyorkfed.org/markets/omo/dmm/temp.cfm.

Repos and Reverse Repos

Temporary OMOs are typically used to address reserve needs that are deemed to be transitory in nature. These operations are either repurchase agreements (repos) or reverse repurchase agreements (reverse repos or RRPs). Under a repo, the FRBNY Trading Desk buys a security under an agreement to resell that security in the future. A repo is the economic equivalent of a collateralized loan; the difference between the purchase and sale prices reflects the interest on the loan.

Under a reverse repo, the Trading Desk sells a security under an agreement to repurchase that security in the future. A reverse repo is the economic equivalent of collateralized borrowing. Reverse repos are a tool that can be used for managing money market interest rates and are expected to provide the Federal Reserve with greater control over short-term rates.⁴

Repo and reverse repo operations are conducted as competitive auctions or as full-allotment operations (up to a maximum bid amount) at a fixed rate. Amounts outstanding under repos and reverse repos are reported weekly in tables 1, 2, 5, and 6 of the H.4.1 statistical release.

Expanded Counterparties for Reverse Repos

Since late 2009, the FRBNY has taken steps to expand the types of counterparties for reverse repos to include entities other than primary dealers. This initiative is intended to enhance the Federal Reserve's capacity to conduct large-scale reverse repo operations to drain reserves beyond what could likely be conducted through primary dealers. The additional counterparties are not eligible to participate in transactions conducted by the FRBNY other than reverse repos.

In 2010 and 2011, the FRBNY initiated three waves of counterparty expansions aimed at domestic money market funds. With each wave, the set of eligi-

Reverse repos may also be executed with foreign official and international account holders as part of a service offering.

bility criteria was broadened to allow more and smaller money market funds to participate as counterparties. In addition, in July 2011, the FRBNY announced that it had accepted two GSEs—Freddie Mac and Fannie Mae—as reverse repo counterparties. In December 2011 and April 2012, the FRBNY announced that several banks had been accepted as reverse repo counterparties. In August 2012, the FRBNY released another round of criteria for the acceptance of banks, savings associations, GSEs, and domestic money market funds as counterparties; institutions accepted under these criteria were announced in January 2013.

On November 12, 2014, the FRBNY again began accepting applications from firms interested in becoming an RRP counterparty. The eligibility criteria were substantially the same as those announced in August 2012. On January 16, 2015, the FRBNY announced the additional counterparties accepted. It is anticipated that this was the last wave of expanded reverse repo counterparties, although firms that meet the eligibility criteria will be allowed to submit applications. The FRBNY does not anticipate increasing the total number of expanded RRP counterparties after the last wave unless the addition of new counterparties is deemed necessary to support the implementation of monetary policy. The FRBNY may amend the list of counterparties at its discretion.

Acceptance as a counterparty does not constitute a public endorsement by the FRBNY of any listed counterparty and should not substitute for prudent counterparty risk management and due diligence. Further information on reverse repo counterparties is available on the FRBNY's website at www .newyorkfed.org/markets/rrp_announcements.html and www.newyorkfed.org/markets/expanded_counterparties.html.

Repo and Reverse Repo Transactions

The FRBNY periodically conducts triparty repo and reverse repo transactions as technical exercises to ensure operational readiness at the Federal Reserve, the major clearing banks, the primary dealers, and other counterparties. The transactions are a matter of prudent advance planning by the Federal Reserve. They do not represent any change in the stance of monetary policy, and no inference should be drawn about the timing of any change in the stance of monetary policy in the future.

In December 2009, the FRBNY conducted its first set of small-scale, real-value, triparty reverse repos with primary dealers. Additional series of small-scale reverse repos were conducted, some of which were open to the sets of expanded counterparties (money market mutual funds, GSEs, banks, and savings associations).

In August 2012, the FRBNY conducted a series of small-value repo transactions with primary dealers using all eligible collateral types. The FRBNY had not conducted a repo since December 2008, and since that time six primary dealers had been added and there had been several changes to the infrastructure of the repo market. Additional series of repos have been conducted since 2012.

In September 2013, the FRBNY began conducting as a technical exercise a series of daily overnight RRP transactions with all eligible counterparties using Treasury collateral. On January 29, 2014, the FRBNY announced that it had been authorized by the FOMC to continue conducting this exercise through January 30, 2015. At the December 2014 FOMC meeting, these operations were authorized for one additional year beyond the previously authorized end date—that is, through January 29, 2016. This exercise is intended to further assess the appropriate structure of overnight RRP operations in supporting the implementation of monetary policy during normalization.

In December 2014, the FRBNY conducted several term RRP operations that crossed year-end. These exercises were intended to enhance operational readiness, to increase understanding of the impact of term RRP operations as a supplementary tool to help control the federal funds rate (particularly when there are significant and transitory shifts in money market activity), and to reduce potential volatility in money market rates. The FRBNY has been authorized by the FOMC to conduct a series of term RRP operations to span each quarter-end through January 2016.

Additional information on repo, overnight RRP, and term RRP operations are available on the FRBNY website at www.newyorkfed.org/markets/rrp_op_policies.html. The results of these operations are available at www.newyorkfed.org/markets/omo/dmm/temp.cfm.

Term Deposit Facility

The Term Deposit Facility (TDF) is a program through which the Federal Reserve Banks offer interest-bearing term deposits to eligible institutions. A term deposit is a deposit with a specific maturity date. The TDF was established to facilitate the conduct of monetary policy by providing a tool that may be used to manage the aggregate quantity of reserve balances held by depository institutions and, in particular (as with reverse repos), to support a reduction in monetary accommodation at the appropriate time. An increase in term deposits outstanding drains reserve balances because funds to pay for them are removed from the accounts of participating institutions for the life of the term deposit.

Term deposits may be awarded either through (1) a competitive single-price auction with a noncompetitive bidding option (which allows institutions to place small deposits at the rate determined in the competitive portion of the operation), (2) a fixed-rate format with full allotment up to a maximum tender amount at an interest rate specified in advance, or (3) a floating-rate format with full allotment up to a maximum tender amount at an interest rate set equal to the sum of the interest rate paid on excess reserves plus a fixed spread. Since September 2014, term deposits have incorporated an early withdrawal feature that allows depositors to obtain a return of funds prior to the maturity date subject to an early withdrawal penalty.

Beginning in June 2010, the Federal Reserve has periodically conducted TDF test offerings as a matter of prudent planning. These offerings are designed to ensure the operational readiness of the TDF and to provide eligible institutions with an opportunity to gain familiarity with term deposit procedures; they have no implications for the near-term conduct of monetary policy. Additional information about term deposits, auction results, and future test operations is available through the TDF Resource Center at www .frbservices.org/centralbank/term_deposit_facility .html.

Securities Lending Program

The Federal Reserve has long operated an overnight securities lending facility as a vehicle to address market pressures for specific Treasury securities. Since July 9, 2009, this facility has also lent housing-related GSE debt securities that are particularly sought after. Amounts outstanding under this facility are reported

weekly in table 1A of the H.4.1 statistical release. Additional information on the Securities Lending program is available at www.newyorkfed.org/markets/securitieslending.html.

Discount Window Lending

Recent Developments

 Credit provided to depository institutions through the discount window remains generally around its historically usual level. As presented in table 5, discount window credit outstanding on October 28, 2015, was \$0.2 billion, and the lendable value of collateral pledged by borrowing institutions on that date was \$2.1 billion.

Background

The discount window helps to relieve liquidity strains for individual depository institutions and for the banking system as a whole by providing a source of funding in times of need. Much of the statutory framework that governs lending to depository institutions is contained in Section 10B of the Federal Reserve Act, as amended. The general policies that govern discount window lending are set forth in the Federal Reserve Board's Regulation A.

Depository institutions have, since 2003, had access to three types of discount window credit: primary credit, secondary credit, and seasonal credit. Primary credit is available to depository institutions in generally sound financial condition with few administrative requirements, at an interest rate that is 50 basis points above the FOMC's target rate for federal funds. Secondary credit may be provided to depository institutions that do not qualify for primary credit, subject to review by the lending Reserve Bank, at an interest rate that is 50 basis points above the rate on primary credit. Seasonal credit provides short-term funds to smaller depository institutions that experience regular seasonal swings in loans and deposits. The interest rate on seasonal credit is a floating rate based on market funding rates.

On September 28, 2012, the Federal Reserve began the regular publication of detailed information on individual discount window loans. In accordance with the Dodd-Frank Act, this information will be made available on a quarterly basis and with an approximately two-year lag. The disclosure includes the name and identifying details of the depository institution, the amount borrowed, the interest rate

Table 3. Discount window credit outstanding to depository institutions

Daily average borrowing for each class of borrower from July 30, 2015, to October 28, 2015

Type and size of borrower	Average number of borrowers ¹	Average borrowing (\$ billions) ²
Commercial banks ³		
Assets: more than \$50 billion	*	**
Assets: \$5 billion to \$50 billion	*	**
Assets: \$250 million to \$5 billion	5	**
Assets: less than \$250 million	49	0.2
Thrift institutions and credit unions	7	**
Total	61	0.2

Note: Unaudited. Includes primary, secondary, and seasonal credit. Size categories based on total domestic assets from Call Report data as of June 30, 2015. Components may not sum to totals because of rounding.

- * Fewer than one borrower.
- ** Less than \$50 million.
- Average daily number of depository institutions with credit outstanding. Over this period, a total of 659 institutions borrowed.
- Average daily borrowing by all depositories in each category.
- 3 Includes branches and agencies of foreign banks.

paid, and information identifying the types and amount of collateral pledged. This detailed information supplements the extensive aggregate information the Federal Reserve has previously provided in weekly, monthly, and quarterly reports, and is available on the Federal Reserve's public website at www .federalreserve.gov/newsevents/reform_quarterly_transaction.htm.

During the financial crisis, the Federal Reserve modified the terms and conditions of the discount window lending programs in order to promote orderly market functioning. Information about these actions is available on the Federal Reserve's public website at www.federalreserve.gov/monetarypolicy/bst_lendingdepository.htm and www.frbdiscountwindow.org.

In extending credit through the discount window, the Federal Reserve closely monitors the financial condition of depository institutions using a four-step process designed to minimize the risk of loss to the Federal Reserve posed by weak or failing borrowers. The first step is monitoring, on an ongoing basis, the safety and soundness of all depository institutions that access or may access the discount window and the payment services provided by the Federal Reserve. The second step is identifying institutions whose condition, characteristics, or affiliation would present higher-than-acceptable risk to the Federal Reserve in the absence of controls on their access to

Table 4. Concentration of discount window credit outstanding to depository institutions

Rank by amount of borrowing	Number of borrowers	Daily average borrowing (\$ billions)
Top five	5	0.1
Next five	5	*
Other	51	0.1
Total	61	0.2

Note: Unaudited. Amount of primary, secondary, and seasonal credit extended to the top five and other borrowers on each day, as ranked by daily average borrowing. Components may not sum to totals because of rounding.

* Less than \$50 million.

Federal Reserve lending facilities and other Federal Reserve services. The third step is communicating—to staff within the Federal Reserve System and to other supervisory agencies, if and when necessary—relevant information about those institutions identified as posing higher risk. The fourth step is implementing appropriate measures to mitigate the risks posed by such entities.

At the heart of the condition-monitoring process is an internal rating system that provides a framework for identifying institutions that may pose undue risks

Table 5. Lendable value of collateral pledged by borrowing depository institutions

Billions of dollars, as of October 28, 2015

Type of collateral	Lendable value	
Loans		
Commercial	0.2	
Residential mortgage	0	
Commercial real estate	*	
Consumer	0	
Securities		
U.S. Treasury/agency	1.7	
Municipal	*	
Corporate market instruments	*	
MBS/CMO: agency-guaranteed	0.1	
MBS/CMO: other	0	
Asset-backed	0	
International (sovereign, agency, municipal, and corporate)	0	
Other		
Term Deposit Facility deposits	0	
Total	2.1	

Note: Unaudited. Collateral pledged by borrowers of primary, secondary, and seasonal credit as of the date shown. Total primary, secondary, and seasonal credit on this date was \$0.2 billion. The lendable value of collateral pledged by all depository institutions, including those without any outstanding loans, was \$1,573 billion. Lendable value is value after application of appropriate haircuts. Components may not sum to total because of rounding.

^{*} Less than \$50 million.

to the Federal Reserve. The rating system relies mostly on information from each institution's primary supervisor, including CAMELS ratings, to identify potentially problematic institutions and classify them according to the severity of the risk they pose to the Federal Reserve. Having identified institutions that pose a higher risk, the Federal Reserve then puts in place a standard set of risk controls that become increasingly stringent as the risk posed by an institution grows; individual Reserve Banks may implement additional risk controls to further mitigate risk if they deem it necessary.

Collateral

All extensions of discount window credit by the Federal Reserve must be secured to the satisfaction of the lending Reserve Bank by "acceptable collateral." Assets accepted as collateral are assigned a lendable value deemed appropriate by the Reserve Bank; lendable value is determined as the market price of the asset, less a haircut. When a market price is not available, a haircut is applied to an internally modeled fair market value estimate. Haircuts reflect credit risk and, for traded assets, the historical volatility of the asset's price and the liquidity of the market in which the asset is traded; the Federal Reserve's haircuts are generally in line with typical market practice.

A borrower may be required to pledge additional collateral if its financial condition weakens. Collateral is pledged by depository institutions under the terms and conditions specified in the Federal Reserve Banks' standard lending agreement, Operating Circular No. 10, available at www.frbservices.org/files/regulations/pdf/operating_circular_10.pdf.

Discount window loans are generally made with recourse to the borrower beyond the pledged collateral. Nonetheless, collateral plays an important role in mitigating the credit risk associated with these extensions of credit. The Federal Reserve generally accepts as collateral for discount window loans any assets that meet regulatory standards for sound asset quality. This category of assets includes most performing loans and most investment-grade securities, although for some types of securities (including commercial mortgage-backed securities, collateralized debt obligations, collateralized loan obligations, and

Table 6. Discount window credit outstanding to borrowing depository institutions—percent of collateral used
As of October 28, 2015

Percent of collateral used	Number of borrowers	Total borrowing (\$ billions)
More than 0 and less than 25	15	*
25 to 50	11	*
50 to 75	6	*
75 to 90	8	*
More than 90	10	*
Total	50	0.2

Note: Unaudited. Components may not sum to totals because of rounding. * Less than \$50 million.

certain non-dollar-denominated foreign securities) only very high-quality securities are accepted. An institution may not pledge as collateral any instruments that the institution or its affiliates have issued. To ensure that they can borrow from the Federal Reserve should the need arise, many depository institutions that do not have an outstanding discount window loan nevertheless routinely pledge collateral. As presented in table 6, depository institutions that borrow from the Federal Reserve generally maintain collateral in excess of their current borrowing levels.

The Federal Reserve periodically reviews its collateral margins and valuation practices. The current lending margins on discount window collateral took effect on August 3, 2015, and reflect the results from the most recent such review, as well as the incorporation of updated market data. Additional information on collateral margins is available on the Discount Window and Payments System Risk public website, www .frbdiscountwindow.org.

Liquidity Arrangements with Foreign Central Banks

Recent Developments

 As presented in table 7, as of October 28, 2015, dollar liquidity extended under the central bank liquidity swap arrangements totaled \$0.1 billion.
 Detailed information about swap operations is available at www.newyorkfed.org/markets/fxswap/ fxswap.cfm.

Background

Because of the global character of bank funding markets, the Federal Reserve has at times coordi-

⁵ CAMELS (Capital, Assets, Management, Earnings, Liquidity, and Sensitivity) is a rating system employed by banking regulators to assess the soundness of commercial banks and thrifts. Similar rating systems are used for other types of depository institutions.

Table 7.	Amounts	outstanding	under U.S	S. dollar liquidity
swaps				

Ac	nf.	Oct	hole	or	20	201	E

Central bank	Total amount outstanding (\$ billions)	Individual transaction amount (\$ billions)	Settlement date	Term	Interest rate
Bank of Canada	0	0	_	_	_
Bank of England	0	0	_	_	_
Bank of Japan	0	0	_	_	_
European Central Bank	0.1	0.1	10/22/2015	7-day	0.63%
Swiss National Bank	0	0	_	_	_
Total	0.1	0.1	_	_	_

Note: Unaudited. Components may not sum to totals because of rounding.

nated with other central banks to provide liquidity. In December 2007, the Federal Reserve entered into agreements to establish temporary currency arrangements (central bank liquidity swap lines) with the European Central Bank and the Swiss National Bank in order to provide liquidity in U.S. dollars. Subsequently, the FOMC authorized swap lines with the Reserve Bank of Australia, the Banco Central do Brasil, the Bank of Canada, the Bank of Japan, Danmarks Nationalbank, the Bank of England, the Bank of Korea, the Banco de Mexico, the Reserve Bank of New Zealand, Norges Bank, the Monetary Authority of Singapore, and Sveriges Riksbank. Two types of temporary swap lines were established: U.S. dollar liquidity swap lines and foreign currency liquidity swap lines. These temporary arrangements expired on February 1, 2010.

In May 2010, temporary U.S. dollar liquidity swap lines were reestablished with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank in order to address the reemergence of strains in global U.S. dollar short-term funding markets. In December 2010, the FOMC authorized an extension of the arrangements through August 1, 2011. In June 2011, the FOMC authorized another extension of the arrangements through August 1, 2012. On November 30, 2011, the FOMC and these five foreign central banks (FCBs) agreed to reduce the rate on these swap arrangements from the U.S. dollar overnight index swap (OIS) rate plus 100 basis points to the OIS rate plus 50 basis points and extended the authorization of these swap arrangements through February 1, 2013. In addition, as a contingency measure, the FOMC agreed to establish temporary foreign currency liquidity swap arrangements that would allow

for the Federal Reserve to access liquidity, if necessary, in any of these foreign central banks' respective currencies. In December 2012, the FOMC and these five FCBs authorized an extension of the temporary U.S. dollar and foreign currency liquidity swap arrangements through February 1, 2014.

The temporary swap arrangements helped to ease strains in financial markets and mitigate their effects on economic conditions. In January 2014, the Federal Reserve and FCBs converted these temporary swap lines to standing arrangements that will remain in place until further notice and will continue to serve as a prudent liquidity backstop. The standing arrangements constitute a network of bilateral swap lines among the six central banks that allow provision of liquidity in each jurisdiction in any of the five currencies foreign to that jurisdiction. Additional information is available at www.federalreserve.gov/newsevents/press/monetary/20131031a.htm.

Since the establishment of the central bank liquidity swap lines in 2007, the Federal Reserve has at times provided U.S. dollar liquidity to FCBs but except for pre-arranged small-value test operations has not drawn any foreign currency. The FRBNY operates the swap lines under the authority granted under Section 14 of the Federal Reserve Act and in compliance with authorizations, policies, and procedures established by the FOMC. Additional information is available at www.newyorkfed.org/markets/liquidity_swap.html and www.federalreserve.gov/monetarypolicy/bst_swapfaqs.htm.

U.S. dollar liquidity swaps consist of two transactions. When an FCB draws on its swap line with the FRBNY, the FCB transfers a specified amount of its currency to the FRBNY in exchange for dollars at the prevailing market exchange rate. The FRBNY holds the foreign currency in an account at the FCB. The dollars that the FRBNY provides are then deposited in an account that the FCB maintains at the FRBNY. At the same time, the FRBNY and the FCB enter into a binding agreement for a second transaction that obligates the FCB to return the U.S. dollars and the FRBNY to return the foreign currency on a specified future date at the same exchange rate as the initial transaction. Because the swap transactions will be unwound at the same exchange rate used in the initial transaction, the recorded value of the foreign currency amounts is not affected by changes in the market exchange rate. At the conclusion of the second transaction, the FCB compensates the FRBNY at a market-based interest rate.

When the FCB lends the dollars it obtained by drawing on its swap line to institutions in its jurisdiction, the dollars are transferred from the FCB account at the FRBNY to the account of the bank that the borrowing institution uses to clear its dollar transactions. The FCB is obligated to return the dollars to the FRBNY under the terms of the agreement. Neither the FRBNY nor the Federal Reserve is counterparty to the loan extended by the FCB. The FCB bears the credit risk associated with the loans it makes to institutions in its jurisdiction.

The foreign currency that the Federal Reserve acquires in these transactions is recorded as an asset

on the Federal Reserve's balance sheet and is shown in tables 1, 5, and 6 of the weekly H.4.1 statistical release in the line entitled "Central bank liquidity swaps." U.S. dollar liquidity swaps have maturities ranging from overnight to three months. Table 2 of the H.4.1 statistical release reports the maturity distribution of the outstanding U.S. dollar liquidity swaps. Detailed information about drawings on the swap lines by the participating FCBs is presented on the FRBNY's website at www.newyorkfed.org/markets/fxswap/fxswap.cfm.

Federal Reserve Banks' Financial Information

The Federal Reserve publishes annual audited financial statements and quarterly unaudited financial reports presenting summary information on the combined financial position and results of operations of the Reserve Banks. The combined information includes the accounts and results of operations of the 12 Reserve Banks and several consolidated variable interest entities. Annual audited financial statements are available on the Federal Reserve Board's website at www.federalreserve.gov/monetarypolicy/bst_fedfinancials.htm, and quarterly unaudited financial reports are available at www.federalreserve.gov/monetarypolicy/bst_fedfinancials.htm#quarterly.

Recent Developments

 On November 20, 2015, the Federal Reserve Board published the "Federal Reserve Banks Combined Quarterly Financial Report" for the third quarter of 2015, which includes summary information on the combined financial position and results of operations of the 12 Reserve Banks and Maiden Lane LLC. All financial information included in the report is unaudited. The report is available on the Federal Reserve Board's website at www .federalreserve.gov/monetarypolicy/bst_ fedfinancials.htm#quarterly.

- The average daily balance of the Federal Reserve SOMA holdings was approximately \$4.2 trillion during the first three quarters of 2015. Net earnings from the portfolio were approximately \$84.0 billion; most of the earnings were attributable to interest income on Treasury securities and federal agency and GSE MBS.
- Total net income for the Maiden Lane LLC was \$30.0 million during the first three quarters of 2015.
- After providing for the payment of dividends and reserving an amount necessary to equate surplus with capital paid in, the Reserve Banks remitted \$73.6 billion to the Treasury during the first three quarters of 2015.

Appendix

Federal Reserve Disclosure Requirements and Other Provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010

On July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protect Act of 2010 was signed into law. The act included changes designed to promote transparency while protecting monetary policy independence and the efficacy of the Federal Reserve's liquidity programs and OMOs. In addition, the act modified the Federal Reserve's authority to provide emergency liquidity to nondepository institutions under Section 13(3) of the Federal Reserve Act and prohibits (with certain exceptions) lending through the discount window to institutions that are registered as swap dealers or major swap participants.

Disclosure Requirements

As provided by the Dodd-Frank Act, on December 1, 2010, the Federal Reserve posted to its public website detailed information about entities that received loans or other financial assistance under a Section 13(3) credit facility between December 1, 2007, and July 21, 2010, and about persons or entities that participated in the agency MBS purchase program, used foreign currency liquidity swap lines, or borrowed through the Term Auction Facility (TAF) during that time frame. This disclosure includes more than 21,000 individual credit and other transactions conducted to stabilize markets during the financial crisis, restore the flow of credit to American families and businesses, and support economic recovery and job creation in the aftermath of the crisis. The Federal Reserve's disclosure about these transactions

is available at www.federalreserve.gov/newsevents/reform_transaction.htm.

As required by the Dodd-Frank Act, the Federal Reserve also posted an audit webpage, available at www.federalreserve.gov/newsevents/reform_audit .htm. This page is updated as reports and other information become available.

The Dodd-Frank Act also established a framework for the delayed disclosure of information on entities that, after July 21, 2010, received a loan from the discount window under Section 10B of the Federal Reserve Act or from a Section 13(3) facility, or participated in OMO transactions. Generally, this framework requires the Federal Reserve to publicly disclose certain information about these discount window borrowers and OMO counterparties approximately two years after the relevant loan or transaction; information about borrowers under future Section 13(3) facilities will be disclosed one year after the authorization for the facility is terminated. Information to be disclosed will include the names and identifying details of each borrower or counterparty, the amount borrowed, the interest rate paid, and information identifying the types and amounts of collateral pledged or assets transferred in connection with the borrowing or transaction. The disclosures of discount window borrowers and OMO counterparties commenced in September 2012; the information is available at www.federalreserve.gov/newsevents/ reform_quarterly_transaction.htm and www .newyorkfed.org/markets/OMO transaction data .html.

Other Provisions

The Dodd-Frank Act modified the Federal Reserve's authority to provide emergency liquidity to nondepository institutions under Section 13(3) of the Federal Reserve Act in light of other amendments that provide the U.S. government with new authority to resolve failing, systemically important nonbank financial institutions in an orderly manner. Going

The full text of the Dodd-Frank Act is available at www.gpo .gov/fdsys/pkg/BILLS-111hr4173enr/pdf/BILLS-111hr4173enr .pdf.

forward, any emergency lending programs and facilities authorized by the Federal Reserve under Section 13(3) of the Federal Reserve Act must have broad-based eligibility and must be approved by the Secretary of the Treasury.

Section 716 of the Dodd-Frank Act prohibits the Federal Reserve from extending discount window credit to "swaps entities," subject to certain exceptions. A swaps entity includes a person that is registered as a swap dealer, security-based swap dealer, major swap participant, or major security-based swap participant under the Commodity Exchange Act or Securities Exchange Act of 1934, other than an insured depository institution that is registered as a major swap participant or major security-based swap participant. The provisions of section 716

became effective on July 16, 2013. Accordingly, in early July 2013 the Federal Reserve amended its Operating Circular No. 10, the standard lending agreement under which institutions borrow from the discount window, in order to comply with the requirements of section 716. Under the amended Operating Circular No. 10, each time that a borrower requests an advance, it must be, and is deemed to represent, that it is not a swaps entity (as defined above), or it is a swaps entity that is eligible to receive the advance pursuant to one or more subsections of section 716 of the Dodd-Frank Act.

sured U.S. branches and agencies of foreign banks are treated as insured depository institutions for purposes of section 716. The interim final rule also set out the process for state member banks and uninsured state branches and agencies of foreign banks to apply to the Board for the compliance transition period provided for in section 716.

See 78 FR 34545 (June 10, 2012). On June 5, 2013, the Federal Reserve Board issued an interim final rule to clarify that unin-



