
DOMESTIC OPEN MARKET OPERATIONS
DURING 2009

A Report Prepared for the Federal Open Market Committee by
the Markets Group of the Federal Reserve Bank of New York
January 2010

DOMESTIC OPEN MARKET OPERATIONS DURING 2009

FEDERAL RESERVE BANK OF NEW YORK, MARKETS GROUP

I. IMPLEMENTATION OF MONETARY POLICY IN 2009.....	1
A. INTRODUCTION.....	1
B. FINANCIAL MARKET CONDITIONS IN 2009.....	1
C. OPERATIONAL PROCEDURES TO INFLUENCE THE FEDERAL FUNDS RATE.....	3
II. FINANCIAL ASSETS, OPEN MARKET OPERATIONS, AND LIQUIDITY FACILITIES	5
A. TEMPORARY OPEN MARKET OPERATIONS	5
B. PERMANENT OPEN MARKET OPERATIONS -- LARGE SCALE ASSET PURCHASES (LSAPs)	6
C. TRADITIONAL STANDING FACILITIES	12
D. SHORT-TERM LENDING PROGRAMS THAT PROVIDED LIQUIDITY TO FINANCIAL INSTITUTIONS	17
E. TARGETED LENDING PROGRAMS INTENDED TO ADDRESS DYSFUNCTIONS IN KEY CREDIT MARKETS.....	23
F. INSTITUTION-SPECIFIC FACILITIES	27
III. CHANGES TO THE FEDERAL RESERVE BANK'S BALANCE SHEET	29
IV. BANKS' DEMAND FOR RESERVE BALANCES.....	30
A. TOTAL BALANCE REQUIREMENTS.....	31
B. EXCESS BALANCES.....	31
V. FACTORS AFFECTING THE SUPPLY OF RESERVE BALANCES.....	32
A. FEDERAL RESERVE NOTES OUTSTANDING.....	32
B. TREASURY'S BALANCE AT THE FED	33
C. FOREIGN RP POOL.....	35
D. FEDERAL RESERVE FLOAT.....	36
E. SUPPLEMENTAL FINANCE PROGRAM (SFP)	36
VI. TRADING IN THE FEDERAL FUNDS AND REPO MARKETS	37
A. THE FEDERAL FUNDS MARKET.....	37
B. THE TREASURY AND AGENCY GENERAL COLLATERAL REPO MARKETS	41
APPENDIX A: AUTHORIZATION FOR DOMESTIC OPEN MARKET OPERATIONS	44
APPENDIX B: GUIDELINES FOR THE CONDUCT OF SYSTEM OPEN MARKET OPERATIONS IN FEDERAL AGENCY ISSUES	48
APPENDIX C: PRIMARY DEALERS	49

DOMESTIC OPEN MARKET OPERATIONS DURING 2009

I. IMPLEMENTATION OF MONETARY POLICY IN 2009

A. Introduction

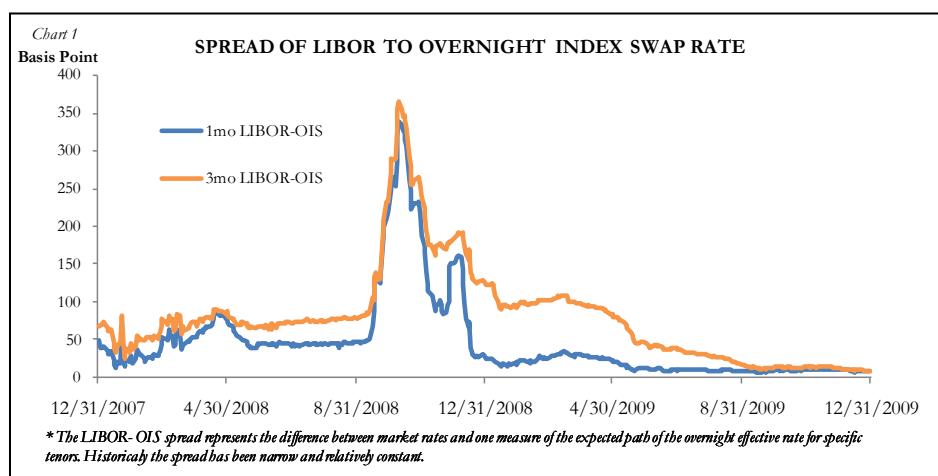
In prior years, the Trading Desk of the Federal Reserve Bank of New York conducted open market operations (OMOs) to influence the federal funds rate. The Desk used OMOs to align the supply of balances held by depository institutions at the Federal Reserve – or reserve balances – with banks' demand to hold balances consistent with maintaining the fed funds rate around the target. During the course of 2008 and 2009, monetary policy responses to financial market pressures and dislocations led to extraordinary growth in the level of reserve balances and a reduction in the target federal funds rate to about zero, such that OMOs were no longer needed to influence the fed funds rate. Under the authorization of the Federal Open Market Committee (FOMC), the Desk's operations during 2009 focused largely on the implementation of large scale asset purchases of Treasury, agency debt and agency MBS assets in the open market, with the objective of improving conditions in private credit markets, and the ongoing implementation of liquidity and credit facilities.

This report reviews the conduct of open market operations during 2009. In the remainder of this section, a summary of financial market conditions is presented, OMOs conducted by the Trading Desk (the Desk) of the Federal Reserve Bank of New York (Federal Reserve) are described, and key new developments in the policy implementation framework are summarized. Section II reviews the composition of financial assets held by the Federal Reserve, open market operations (including large scale asset purchases), and the various liquidity and credit facilities that were implemented in 2007/2008 and continued in 2009. In section III, changes to the Federal Reserve's balance sheet are examined. In section IV, the demand for balances at the Federal Reserve is presented, and in section V the behavior of the traditional autonomous factors – balance sheet items outside the direct control of the Desk – that affect the supply of these balances are reviewed. The Treasury's Supplemental Financing Program (SFP) is also discussed. In section VI, the general behavior of the fed funds and repo markets in 2009 are presented.

B. Financial Market Conditions in 2009

Over the course of 2009, the financial market pressures that emerged in August 2007 and intensified during 2008, began to abate to a considerable degree. The year began with the U.S. Treasury Department's Troubled Asset Relief Program (TARP) and several Federal Reserve sponsored

emergency liquidity and credit facilities, many of which were authorized under Section 13(3) of the Federal Reserve Act,¹ continuing to provide support for funding and liquidity. Tenuous funding conditions persisted through the first quarter of the year and on February 10, the Treasury announced a broad Financial Stability Plan that included the authorization of the Supervisory Capital Assessment Program (SCAP). Conducted by federal supervisory agencies, including the Federal Reserve, SCAP was designed to better assess the capital adequacy of major U.S. banking institutions under a base case and a stressed scenario. Following early indications of better-than-expected first quarter earnings results for several large financial institutions, and concurrent to continued support provided by Federal Reserve credit and liquidity facilities, pressures in short-term funding markets began to ease in earnest over the spring of 2009, as evidenced by the steady decline in 1-month and 3-month LIBOR fixings. In May 2009, the SCAP results were publicly released and revealed that, despite losses associated with economic conditions and financial market turmoil, most U.S. banking organizations had capital levels well in excess of the amounts required to be well capitalized across both base and stressed scenarios. The markets took comfort in these results, particularly in conjunction with the better-than-expected first quarter earnings results, as evidenced by the spread between term unsecured interbank rates and the overnight index swap rate (OIS). This spread is an important indicator of strains in the bank funding market, and following record highs in 2008, narrowed considerably in 2009 (Chart 1). By year-end, conditions in funding markets were such that most firms had ample access to short-term funding.



¹ Section 13(3) of the Federal Reserve Act states: “In unusual and exigent circumstances, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members, may authorize any Federal Reserve Bank...to discount for any individual, partnership, or corporation, notes, drafts, and bills of exchange,” provided that the loan is secured by adequate collateral, the borrower is “unable to secure adequate credit accommodations from other banking institutions,” and certain other requirements are met.” <http://www.federalreserve.gov/aboutthefed/section13.htm>

C. Operational Procedures to Influence the Federal Funds Rate

Developments in the Implementation of Monetary Policy

In response to unprecedented market dislocations, various government-sponsored programs were created in 2007 and 2008 that added a significant amount of liquidity to financial markets. Following a series of reductions in the target rate in response to deteriorations in the economic outlook, the FOMC established a zero to 25 basis point target range for the fed funds rate in December of 2008. Reserve balances increased dramatically in the latter part of 2008, primarily reflecting large amounts of credit provided under the Federal Reserve's various liquidity and credit programs. In 2009, credit extended through these programs gradually declined, but reserve balances continued to increase, on net, with the expansion of the System holdings of securities under the Federal Reserve's large scale asset purchases (LSAPs).

Facilities and Operations that Impacted Reserve Levels

Several facilities designed to provide a backstop to funding and credit markets during periods of market stress reached peak usage levels in late 2008 or early 2009, and steadily declined during the remainder of 2009 as financial conditions improved. In terms of liquidity facilities, the largest dollar level declines in outstanding balances occurred in the Term Auction Facility (TAF), the reciprocal dollar swap lines with foreign central banks, and the reserve-neutral Term Securities Lending Facility (TSLF). Regarding credit facilities, the Commercial Paper Funding Facility (CPFF) reached its peak in January 2009, but declined considerably over the course of the year. The Term Asset-Backed Securities Loan Facility (TALF) became operational in March 2009 with an authorized capacity of \$200 billion, and credit extended under the TALF rose gradually over the year, reaching \$48 billion at year-end.

In November 2008, a program to purchase \$500 billion in agency MBS and \$100 billion of agency debt was announced in order to improve conditions in mortgage and housing markets and to support market functioning more generally. In March 2009, these LSAP programs were expanded to include a total of \$1.25 trillion of agency MBS and \$200 billion of agency debt. Additionally, a program to purchase up to \$300 billion of Treasury assets was introduced. Execution of these programs more than offset the reserve effects of the declines in credit and liquidity facilities. Later in 2009, the FOMC extended the time frame over which each program was to be executed in order to facilitate a tapering of program purchases to foster a smooth transition in the markets. These programs are discussed in detail in section II.B below.

Interest on Required and Excess Reserves

In October 2008, the Federal Reserve began paying interest on depository institutions' (DIs) required and excess reserve balances and, at the December 2008 FOMC meeting, the rates paid on required (IOR) and excess reserve balances (IOER) were set at 25 basis points and remained at that level for the duration of 2009.

The payment of IOER helps maintain demand for reserve balances and thus a positive fed funds rate, while allowing the Federal Reserve to conduct lending and purchase programs to address conditions in financial markets. Given the structural aspects of the fed funds market (Government Sponsored Entities (GSEs) and securities firms are eligible to sell fed funds as per the Federal Reserve's Regulation D, yet are ineligible for IOER), it is not surprising that the fed funds routinely traded below 25 basis points during the year. In fact, the percentage of reported fed funds transactions that occurred above the IOER rate declined significantly throughout 2009. Although the IOER rate has not functioned as a de facto floor rate for overnight lending rates, its presence has helped stimulate the marginal demand for reserves and generally prevented ultra-low nominal rate trading in fed funds. This is discussed further in section VI.A.

Development of Tools Intended to Facilitate Reserves Drains

Beginning with the March 2009 monetary policy meeting, the FOMC kept the target fed funds range unchanged at zero to 25 basis points and stated that "economic conditions are likely to warrant exceptionally low levels of the fed funds rate for an extended period."² However, as part of prudent advance planning for the potential need to drain significant volumes of reserves at some point, several new monetary policy implementation tools are being developed. Inferences regarding the likely timing of policy firming should not be drawn from such preparations.³

- *Tri-party Reverse Repurchases.* On October 19, the Federal Reserve issued a statement indicating that as a matter of prudent advance planning, it had been working internally and with market participants on operational readiness for reverse repurchase agreements, to ensure that this tool will be ready if and when the FOMC decides to use them. The statement further indicated that the focus of the work was to expand the Federal Reserve's existing capability to conduct reverse repos with primary dealers to include tri-party

² In the January 2009 statement, the FOMC stated that "economic conditions are likely to warrant exceptionally low levels of the fed funds rate for some time." The phrase "some time" was replaced with "extended period" in the FOMC's subsequent statements in 2009.

³ During his July testimony before the U.S. House of Representatives Committee on Financial Services, Chairman Bernanke cited specific monetary policy tools that could be used in the future to impact short-term rates and/or drain reserves, including raising IOER, conducting reverse repurchase agreements with dealers and other counterparties, and outright sales of SOMA holdings.

settlement, but that the Federal Reserve was also studying the possibility of expanding the set of counterparties the Desk might employ for conducting reverse repos beyond the primary dealers. In December 2009, the Desk and primary dealers engaged in five small-scale, real value tri-party reverse repurchase agreements, of which four utilized Treasury securities as collateral and one utilized agency debt as collateral. The operation terms ranged from one to eight days, all settling one business day forward. In aggregate, the transactions totaled \$990 million and matured prior to the year-end.

- *Term Deposit Facility.* On December 28, the Board of Governors proposed amendments to Regulation D that would enable the establishment of a term deposit facility. Under the proposal, the Federal Reserve Banks would offer interest-bearing term deposits to eligible institutions through an auction mechanism. In the announcement, the Board noted that term deposits would be “one of several tools that the Federal Reserve could employ to drain reserves and support the effective implementation of monetary policy.”⁴ The proposal is currently out for public comment.

Other tools that have been discussed in public forums by Federal Reserve officials that could be used to influence interest rates and/or drain reserves were sales and redemptions of SOMA assets, continuation of the Treasury’s Supplemental Financing Program, and changes to the interest paid on excess reserves.

II. FINANCIAL ASSETS, OPEN MARKET OPERATIONS, AND LIQUIDITY FACILITIES⁵

A. Temporary Open Market Operations

Before autumn of 2008, the Federal Reserve engaged in two types of open market operations, *permanent* operations and *temporary* operations. Outright holdings of U.S. Treasury securities via purchases had traditionally accounted for the bulk of the portfolio’s holdings but only a small share of the volume of the Desk’s OMOs. Temporary repurchase (RP) agreements had traditionally been used to address reserve level fluctuations that were perceived to be transitory in nature. For any given total size of the domestic financial portfolio, the Desk typically structured its outright holdings to maintain a need to add reserve balances routinely by arranging RPs. The targeted magnitude of this structural deficiency allowed the Desk to respond to volatility in the supply of and demand for reserve balances and to forecasted changes in autonomous factors by adjusting the level of RPs

⁴ <http://www.federalreserve.gov/newsevents/press/monetary/20091228a.htm>

⁵ For more details regarding the various liquidity facilities, see <http://www.federalreserve.gov/newsevents/recentactions.htm> and <http://www.newyorkfed.org/markets/index.html>.

outstanding. This approach avoided a routine need to drain reserves with reverse repurchases (RRP) agreements, or to reduce the permanent portfolio through securities sales and redemptions. The Desk typically addressed increases in the level of autonomous factor liabilities that are expected to be long lasting through outright purchases of U.S. Treasury securities for the System Open Market Account (SOMA). Maturing securities were routinely reinvested in new issues at auction.

Beginning in autumn 2008 and driven by the deterioration of funding and credit market conditions, the Desk's traditional paradigm for structuring the portfolio and conducting open market operations has been adjusted. As the size and composition of the SOMA has expanded, the portfolio itself has become a more direct instrument of policy. The creation of numerous liquidity and credit facilities and the commencement of the LSAP programs resulted in a high level of reserves in the banking system, eliminating the need for conventional RPs to add reserves on a temporary basis. Indeed, the Desk did not conduct any conventional RP operations in 2009. For a discussion of the historical use of short-term and long-term RPs, please see pages 8 through 11 in the [2008 Annual Report of Domestic Open Market Operations](#).

B. Permanent Open Market Operations -- Large Scale Asset Purchases (LSAPs)

The expansion of the SOMA portfolio in 2009 was attributable almost entirely to the Desk's LSAPs of Treasury securities, agency debt securities, and agency mortgage backed securities. In prior years, the Desk generally purchased U.S. Treasury securities in order to offset currency growth that was forecast to be permanent. The LSAPs deviated from this approach and were designed to improve conditions in private credit markets and to provide support to mortgage lending and housing markets.

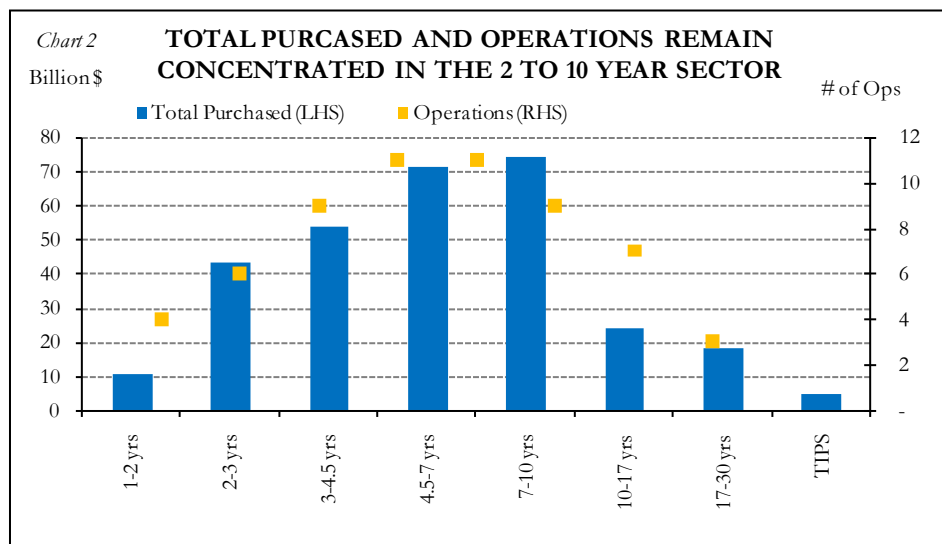
Purchases of U.S. Treasury securities

During 2009, permanent holdings of U.S. Treasury securities in the SOMA portfolio increased from \$470.0 billion to \$770.7 billion. The increase was essentially due to a \$300 billion expansion as a result of the longer-dated Treasury purchase program. It also included \$0.6 billion in realized Treasury Inflation-Indexed Securities (TIIS) inflation compensation.⁶

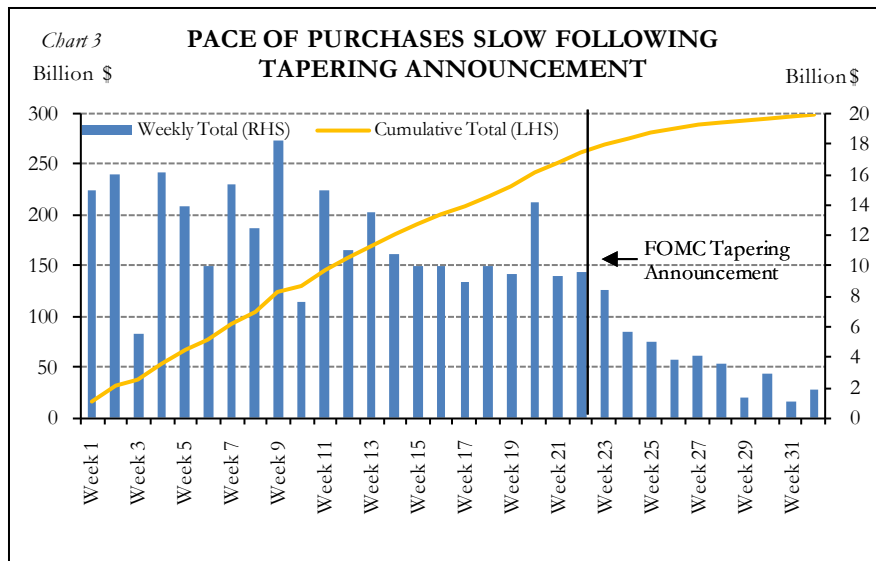
Growth in the SOMA U.S. Treasury securities portfolio was achieved through outright purchases of U.S. Treasury securities in the secondary market, of which the Desk conducted \$300 billion in 2009. At the outset of the program the Desk announced that it would concentrate its purchases in the 2 to

⁶ The SOMA portfolio realizes inflation compensation upon maturity of TIIS holdings.

10 year sector of the Treasury curve and the Desk allocated just over 80 percent of the \$300 billion to this sector. Indeed, over the course of the program the Desk purchased \$242 billion in nominal Treasury securities maturing in 2 to 10 years, \$42 billion maturing in 10 to 30 years, \$11 billion maturing in 1 to 2 years and \$5 billion in TIPS (Chart 2).



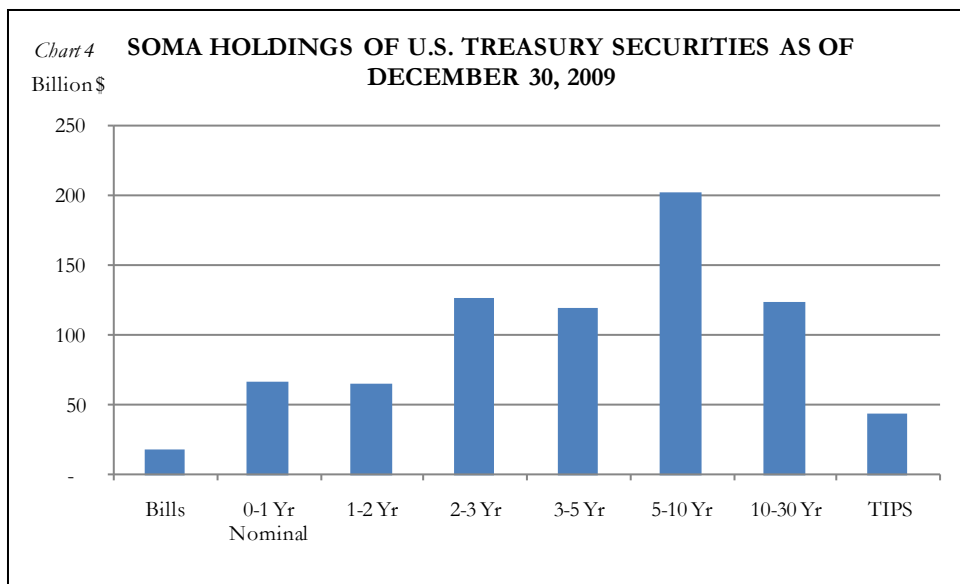
At the August monetary policy meeting, the FOMC announced that it would extend its purchases of Treasury securities through the end of October and gradually slow the pace of operations to promote a smooth transition in markets. Following this announcement, the Desk decreased both the size of individual operations and the frequency of operations. Prior to this announcement, Desk purchases averaged \$12 billion per week and the Desk averaged two operations per week, while after this announcement purchase sizes declined continually in each sector and the Desk averaged only one operation per week. The Desk reached \$300 in outright Treasury securities coupon purchases on October 29, 2009 (Chart 3).



In addition to purchases conducted under the LSAP program, the Desk continued to roll over Treasury holdings using its traditional approach of replacing maturing holdings with newly issued debt at Treasury auctions. The reinvestment process differs slightly between bills and coupons. For maturing coupon securities, the Desk reinvests maturing securities by placing add-on bids for the SOMA, noncompetitively at auction, equal to the lesser of (a) its maturing holdings on the issue date of a new security or (b) the amount that would bring the SOMA holdings as a percentage of the issue to specified percentage guideline limits. For maturing bill proceeds, the full amount is reinvested in new 4-week Treasury bills. This practice for reinvestment of weekly bill maturities was adopted in 2008 and remained in place for 2009.

The Treasury announced a “call” of three coupon securities held in the SOMA portfolio in 2009, totaling \$3.2 billion. The Desk rolled this entire amount into newly issued securities with matching settlement dates. SOMA no longer holds callable Treasury debt in the portfolio.

The distribution of the SOMA holdings of U.S. Treasury securities by remaining maturity at the end of 2009 is shown in Chart 4. The average remaining maturity of the SOMA portfolio was 81.6 months at the end of the year, compared to an average remaining maturity of 56.2 months on all outstanding marketable Treasury debt. At the end of 2008, the average remaining maturities of the SOMA portfolio and of outstanding Treasury debt had been 82.8 months and 50.6 months, respectively. At the end of 2009, 10.6 percent of total outstanding marketable Treasury debt was held in the SOMA portfolio, up from 8.1 percent one year earlier.



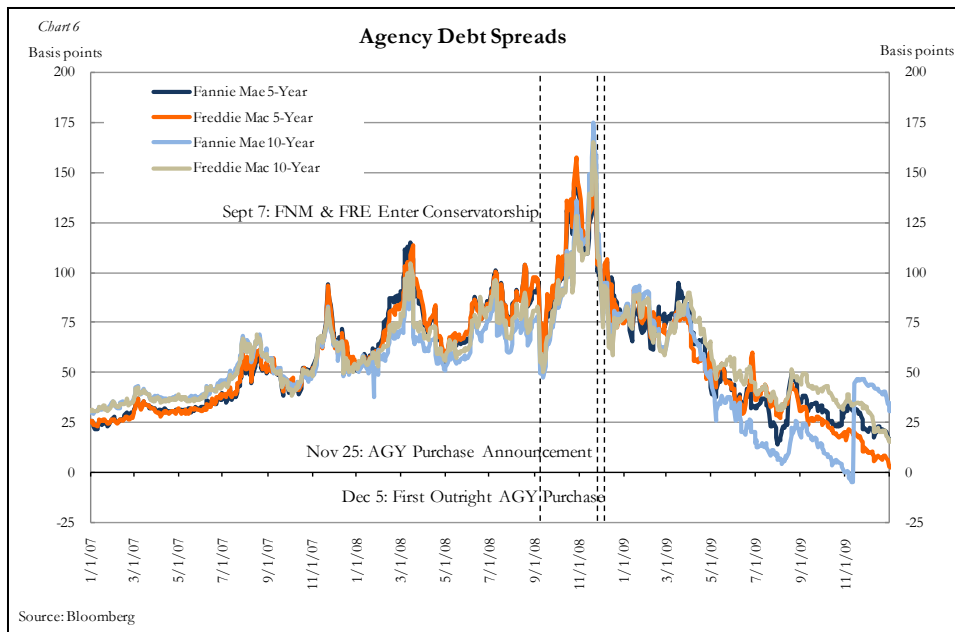
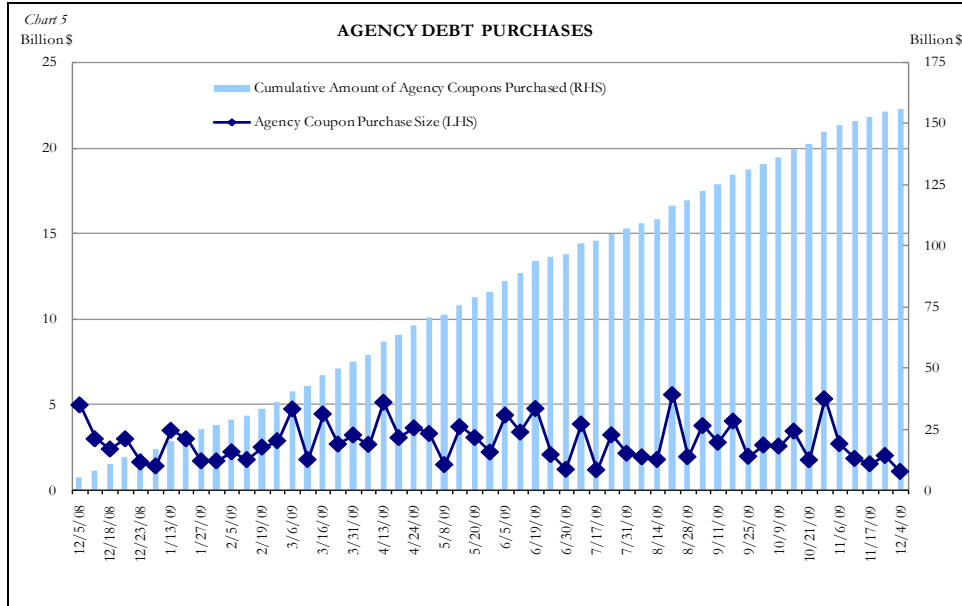
Purchases of Agency Debt Securities

During 2009, permanent holdings of agency debentures in the SOMA portfolio increased from \$15.0 billion to \$159.9 billion. The increase was solely due to an expansion of holdings as a result of the LSAPs.

Growth in the SOMA agency debentures portfolio was achieved through a continuation of the program initiated in November 2008.⁷ The Desk conducted purchases on average once per week and purchased on average \$2.7 billion in each operation. However, to promote a smooth transition in markets towards the end of Desk purchases, the average purchase amount declined to \$2.0 billion starting in late September.⁸ By the end of 2009, the Desk had purchased just under \$160 billion in agency debentures, and agency debt spreads in the 2 and 10 year tenors had narrowed up to 170 and 100 basis points, respectively, from the program announcement (Charts 5 and 6).

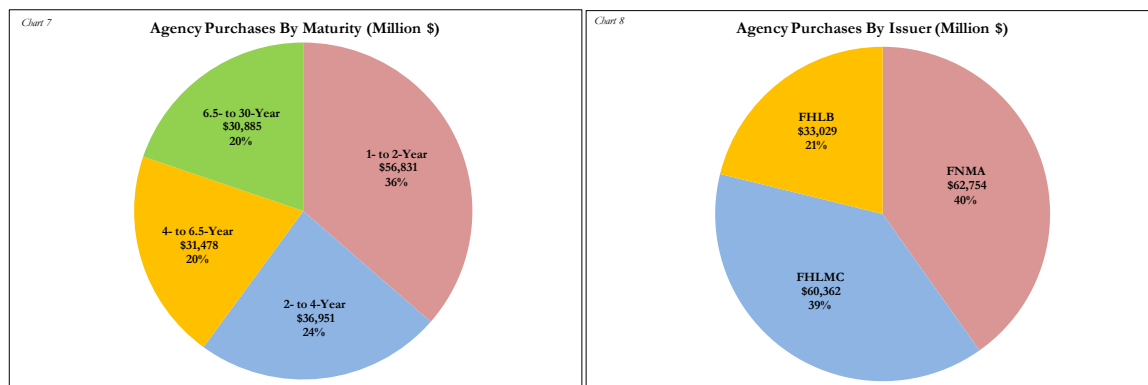
⁷ In November 2008, the Federal Reserve announced it would purchase “up to \$100 billion” in GSE direct obligations in conjunction with purchases of agency MBS assets to “reduce the cost and increase the availability of credit for the purchase of houses, which in turn should support housing markets and foster improved conditions in financial markets more generally.” The size of the program was raised to “up to \$200 billion” at the March 2009 FOMC meeting, though this amount was further defined to “about \$175 billion” at the November 2009 FOMC meeting.

⁸ In September, the FOMC decided to gradually slow the pace of purchases for both the agency debt and agency MBS programs “in order to promote a smooth transition in markets.” The Committee also noted that it “anticipates that (purchases) will be executed by the end of the first quarter of 2010.”



In September 2008, the Federal Reserve authorized the Desk to purchase short-term agency discount notes in the secondary market to support market functioning. Of the \$14.5 billion in agency discount note holdings purchased in 2008, \$9.8 billion were redeemed in 2008 and \$4.7 billion were redeemed in 2009, leaving no agency discount notes holdings in the SOMA at year-end. In addition, there was a \$30 million redemption of one agency coupon security in December 2009.

SOMA agency debt holdings are concentrated in shorter-dated maturities and in issues from Freddie Mac and Fannie Mae. In particular, SOMA agency debt holdings with maturities of less than 2 years comprise 36 percent of the portfolio while maturities between 2 and 4 years comprise 25 percent of the portfolio. SOMA agency debt holdings are nearly evenly divided between obligations of Fannie Mae and Freddie Mac which make up 79 percent of the portfolio. FHLB debt comprises the remaining holdings (Charts 7 and 8).



Purchases of Agency Mortgage Backed Securities

On January 5, 2009, the Desk began purchasing U.S. agency mortgage-backed securities in the open market on behalf of the SOMA.⁹ The program initially called for purchases up to \$500 billion by the end of the second quarter of 2009. It was later expanded to an amount up to \$1.25 trillion at the March FOMC meeting to be completed by year-end. The program was introduced in order to “support mortgage and housing markets and to foster improved conditions in financial markets more generally.”

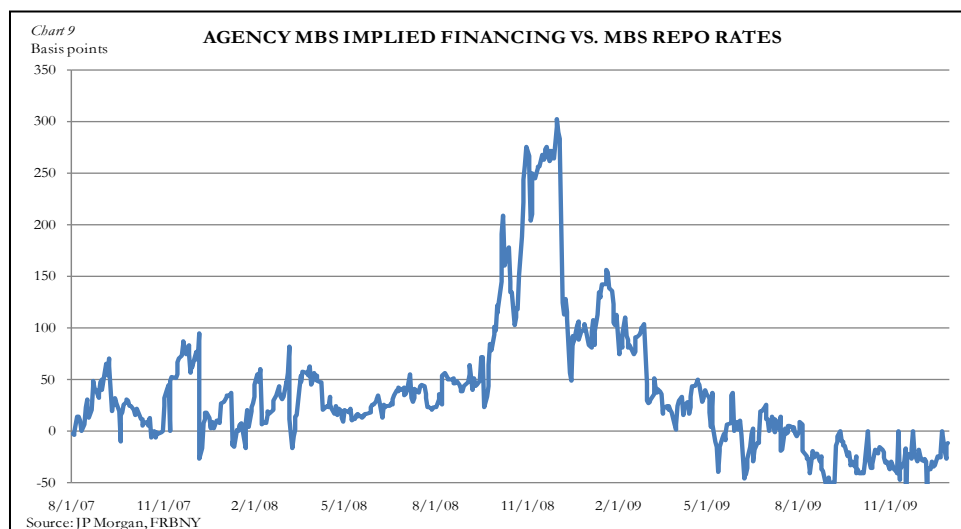
The Desk arranged purchases of agency MBS on a daily basis through a set of external investment managers.¹⁰ The expansion of the program in March required the Desk to increase the targeted weekly pace of purchases from \$23 billion to \$26 billion. Purchases were made across securities with different issuers, maturities and coupon rates, but were generally concentrated in low coupon, 30 year securities issued by Fannie Mae and Freddie Mac.

⁹ U.S. agencies refer to Fannie Mae, Freddie Mac and Ginnie Mae.

¹⁰ The Federal Reserve initially retained four investment managers to quickly and efficiently accommodate the operational and financial complications of open market MBS purchases. As of August 2009, the Federal Reserve streamlined the set of external investment managers, reducing the number four to two, one manager for trading and settlement services and another manager to provide risk and analytics support. These adjustments were made to better leverage the Federal Reserve’s internal analytical and operational expertise.

On September 23, the FOMC announced the program’s commitment to purchase the full \$1.25 trillion in agency MBS and an extension to complete the purchases by the end of the first quarter of 2010. This allowed the Desk to decrease the weekly purchase pace from \$26 billion to \$15 billion.¹¹ At year-end, the Desk had purchased a total of \$1.111 trillion.

The program also arranged transactions in dollar rolls in an effort to support MBS financing.¹² The focus of dollar roll activity changed over 2009. Initially the Federal Reserve was a significant buyer of dollar rolls, providing support to short-term financing markets at a time when financing markets were still strained. This dollar roll spread over comparable one month financing rates soon declined approximately 50 basis points to move within historical norms (Chart 9).¹³ Later in 2009, the program tended to be a seller of dollar rolls in order to facilitate a more orderly settlement of the program’s significant volume of trades.



C. Traditional Standing Facilities

Facilities that had been available for use prior to the beginning of the credit crisis in August 2007 include the overnight SOMA securities lending program and the discount window’s primary credit facility. Both were adjusted in their terms over the course of the financial crisis and both were utilized in 2009.

¹¹ Purchases were actually \$9.3 billion during the week ending Wednesday, December 30, due to a sharp decline in liquidity as year-end approached. The prior week’s purchase was \$15 billion.

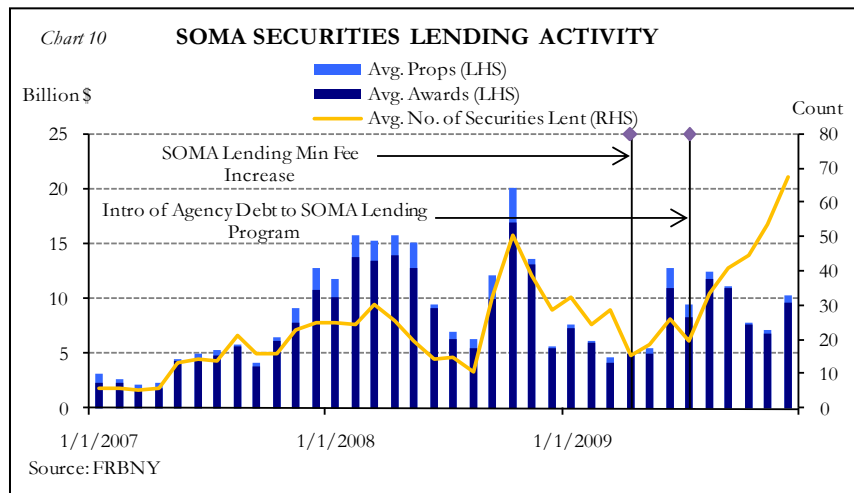
¹² Dollar rolls are short-term financing vehicles that function similarly to repo and, hence, historically imply similar financing rates in well-functioning markets. The Desk created guidelines for determining when implied financing roll rates indicate dislocation that warrants Desk support.

¹³ Calculations are done using FRBNY MBS prepayment assumptions, a key factor in determining dollar roll implied financing rates.

SOMA Securities Lending Activity

Given the Federal Reserve’s large holdings of Treasuries and to promote the smooth clearing of these securities, the Federal Reserve has long operated a securities lending program. The program offers securities for loan, on an overnight basis, in accordance with specified terms and conditions. Securities are awarded to primary dealers based on competitive bidding in an auction held each business day at noon. Securities loans are collateralized with U.S. Treasury securities rather than cash so there is no effect on reserve balances.

In April 2009, the Desk raised the minimum SOMA securities lending fee from 0.01 percent to 0.05 percent in response to improved liquidity conditions in the repo market for specific Treasury issues.¹⁴ This change helped partially restore the program to its intended purpose as a temporary and secondary source of specific Treasury collateral, as it became slightly less economical for primary dealers to borrow securities from SOMA that were not trading special (i.e. below overnight Treasury general collateral rates). While lending activity initially declined, volumes subsequently rose due to the following factors: increased volatility in the Treasury market, the introduction of agency debt lending to the SOMA program, and the historically low minimum fee, particularly given the program’s widely-considered guaranteed delivery. Nevertheless, daily average SOMA lending volumes declined from \$10.8 billion in 2008 to \$7.8 billion in 2009, as pressures in Treasury collateral funding markets for specific issues eased (Chart 10).



¹⁴ The fee remains well below the pre-crisis level of 1 percent.

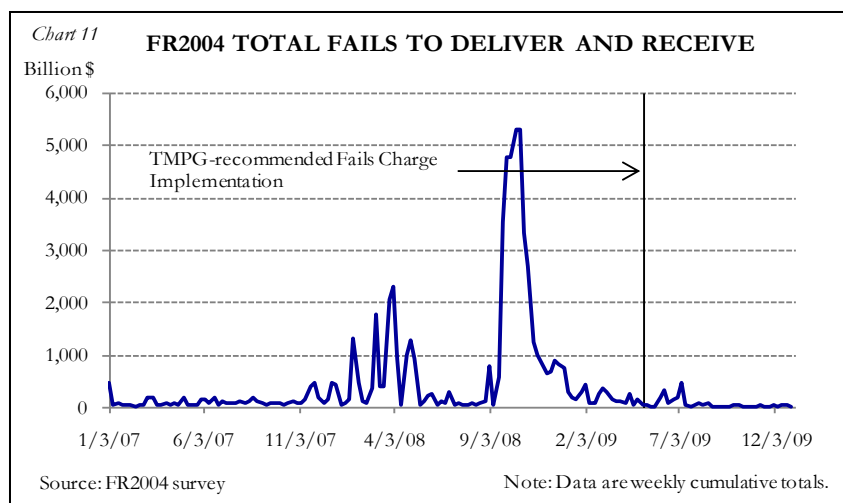
Given the accumulation of agency debt securities through the LSAP program and in order to aid liquidity for specific securities, agency debt securities were added to the securities lending program in July 2009. Demand for agencies was initially weak, with dealers borrowing only \$183 million per day on average, as traders were reluctant to short agency debt securities in the midst of the Federal Reserve's agency LSAP program. However, following the September FOMC announcement that the Desk would begin tapering off its agency debt purchases, SOMA lending of agency debentures rose to a daily average of \$777 million.

The securities lending program also adopted the recommendation of the Treasury Market Practices Group (TMPG) to charge for delivery fails in the U.S. Treasury securities market beginning on May 1, 2009. The TMPG recommendation followed an episode of widespread, chronic settlement fails in the fall of 2008, and was intended to reduce the likelihood of similar occurrences in the future.¹⁵ Market participants suggest that the recommendation has been widely adopted by a broad range of participant types.¹⁶ The Federal Reserve has also endorsed the fails charge and adopted this trading practice into all of its Treasury-related operations.¹⁷ Since the implementation of the fails charge, settlement fails have remained near historically low levels, and market participants note that negative rate trading in the specials repo market has grown more prevalent. They suggest that the effective removal of the zero bound on repo rates has thus enabled specials to trade at their market-determined equilibrium rates in the current low interest rate environment, thus facilitating smoother Treasury market clearing (Chart 11).

¹⁵ Please see the TMPG's website for additional information on the fails charge recommendation: <http://www.newyorkfed.org/tmpg>.

¹⁶ Although the fails charge recommendation is voluntary for most market participants, a [rule change](#) proposed by the FICC, and [approved by the Securities and Exchange Commission](#), makes the fails charge mandatory for all FICC members.

¹⁷ <http://www.newyorkfed.org/newsevents/news/markets/2009/ma090501.html>



Primary Credit Facility (PCF)

The Federal Reserve’s primary credit facility (PCF) serves as a backup source of liquidity for depository institutions in generally sound financial condition and with appropriate collateral pledged to a Reserve Bank. The use of the facility is initiated by depository institutions and approved at the discretion of Reserve Banks. This facility is a critical component of the monetary policy implementation framework, one that helps the Desk to achieve its operating objective for the overnight fed funds rate by helping to limit upward rate pressures when there has been a net reserve shortage. (Given the extraordinarily large volume of reserves currently in the banking system, this feature has been less significant recently.)

Generally speaking, there was a broad based demand to borrow under the PCF in 2009, as many of the significant market dislocations from the fall of 2008 were still evident, particularly in the first quarter. Although facility usage remains elevated by historical standards, borrowing levels decreased markedly over the course of 2009 (Chart 12). Total primary credit borrowing averaged \$32 billion from April through December, compared to an average \$66 billion from January through March (Table 2).

During 2009, Reserve Banks continued to extend primary credit at a rate of 50 basis points, 25 basis points above the high end of the target fed funds range, with the maximum maturity of primary credit loans remaining at 90 days.¹⁸ Amid improving conditions in the interbank lending market, in

¹⁸ On March 16, 2008, Reserve Banks began to extend primary credit at a rate 25 basis points above the fed funds target rate down from the 50 basis points established in August 2007.

November 2009, the Federal Reserve reduced the maximum term of primary credit loans to 28 days from 90 days effective January 14, 2010.¹⁹

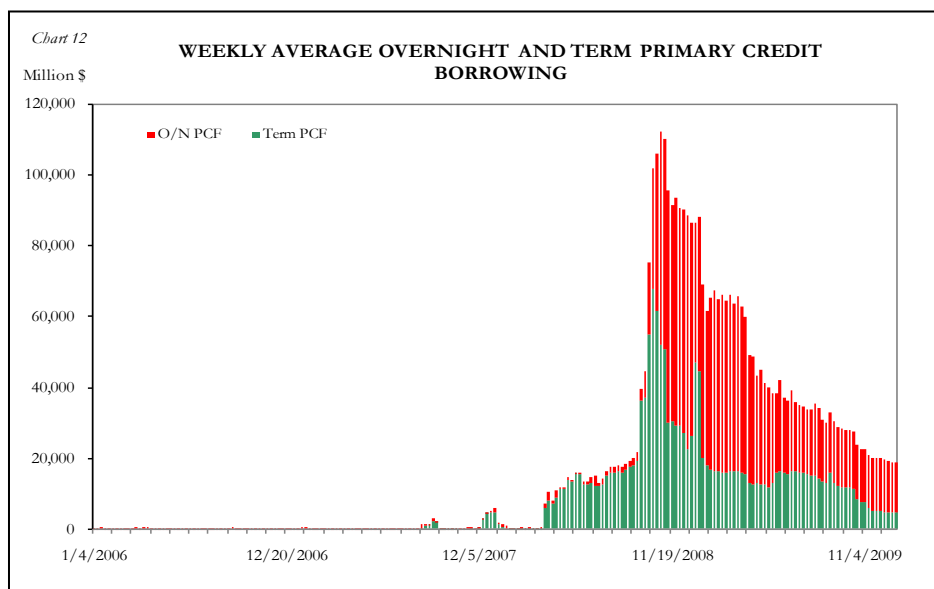


Table 1

AVERAGE PRIMARY CREDIT BORROWING

	<u>2006</u>	<u>2007</u>	<u>2008 Before March 17</u>	<u>2008 Since March 17, Before September 15</u>	<u>2008 Since September 15</u>	<u>First Quarter of 2009</u>	<u>Remaining Three Quarters of 2009</u>
<i>Daily Averages, \$ million</i>	59	552	599	13,701	85,814	66,531	31,579

In October 2009, the Federal Reserve implemented new collateral margins for lending and payment system risk purposes. There were no changes to the key principles underlying the Federal Reserve’s collateral management practices; however, the changes reflect analytical improvements in methodology, technical improvements to models, and the use of better and more granular data in the analyses.²⁰

¹⁹ On August 17, 2007, in order to promote orderly market functioning, the Federal Reserve began to allow the provision of primary credit for terms as long as 30 day. In March 2008, the maximum maturity of primary credit loans was increased to 90 days. Additional collateral is required for loans with remaining maturity of more than 28 days and institutions can only borrow up to 75 percent of available collateral for such loans.

²⁰ The Discount Window and Payment System Risk Collateral Margins Table can be found here: http://www.frbdiscountwindow.org/valuation_margining_approach.cfm?hdrID=21&dtlID=.

D. Short-Term Lending Programs that Provided Liquidity to Financial Institutions

In order to support financial markets and economic conditions more generally, the Board of Governors and/or the FOMC authorized a number of facilities that were announced or introduced in 2007 and 2008, and largely remained in effect through 2009 to provide backstop liquidity to financial institutions. These were the Term Auction Facility, reciprocal dollar swap lines with foreign central banks, the Primary Dealer Credit Facility, the Term Securities Lending Facility (including the Options Program), the Asset-Backed Commercial Paper Money Market Mutual Fund Lending Facility, and the Money Market Investor Funding Facility.

Term Auction Facility (TAF)

TAF auctions, introduced in December 2007 and expanded in size and scope in 2008, remained constant at an offering size of \$150 billion of 28- and 84-day funds during the first part of 2009. As conditions eased in broader funding markets and depository institutions sought to reduce reliance on government supported facilities, demand for TAF loans declined. As such, on June 25, July 24, and August 28, the Federal Reserve decreased the amount offered through TAF auctions to \$125 billion, \$100 billion, and \$75 billion, respectively. On September 24, the Federal Reserve announced that the TAF would be scaled back even further in response to continued improvements in financial market conditions and waning demand. The offering amount under the 28-day auctions remained unchanged from their September level of \$75 billion through January 2010. The auction amount for the 84-day auctions was reduced to \$50 billion in October and to \$25 billion in November, both of which were also undersubscribed (Chart 13). In addition, the maturity dates of the 84-day auctions were adjusted to align with the maturity dates of the 28-day auctions so that by early 2010 all TAF auctions would be on a 28-day cycle (Table 2). Following the December 2009 meeting, the Federal Reserve stated that it expected the amounts provided under the TAF will continue to be scaled back in 2010. TAF credit outstanding over year-end totaled \$75.9 billion.

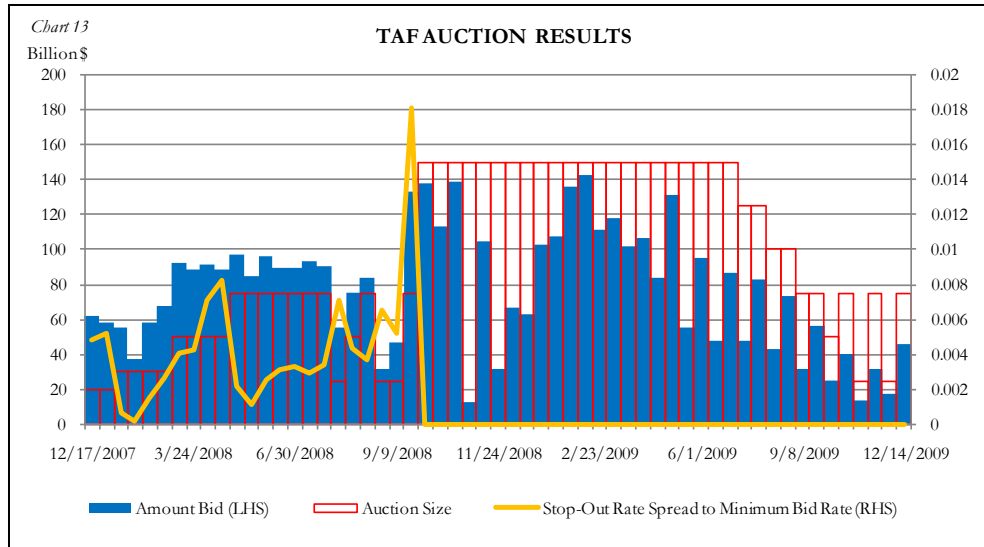


Table 2

84-DAY TERM AUCTION FACILITY (TAF) CHANGES SINCE OCTOBER 2009

(Billion \$)

<u>Date of Auction</u>	<u>Term</u>	<u>Amount Offered</u>
October 5	70-Days	\$50
November 2	70-Days	\$25
November 30	42-Days	\$25

Reciprocal Currency Arrangements (Central Bank Liquidity Swap Lines) with other Central Banks

Beginning in 2007, Federal Reserve established U.S. dollar liquidity swap lines with the Reserve Bank of Australia, the Banco Central do Brasil, the Bank of Canada, Danmarks Nationalbank, the Bank of England, the European Central Bank, the Bank of Japan, the Bank of Korea, the Banco de México, the Reserve Bank of New Zealand, Norges Bank, the Monetary Authority of Singapore, Sveriges Riksbank, and the Swiss National Bank in response to market dislocations and the ensuing high demand for dollar funding in overseas markets.²¹ Over 2009, the outstanding draws on the swap lines declined from \$554 billion to \$10 billion, while the number of central bank counterparties with outstanding transactions declined from nine to three.

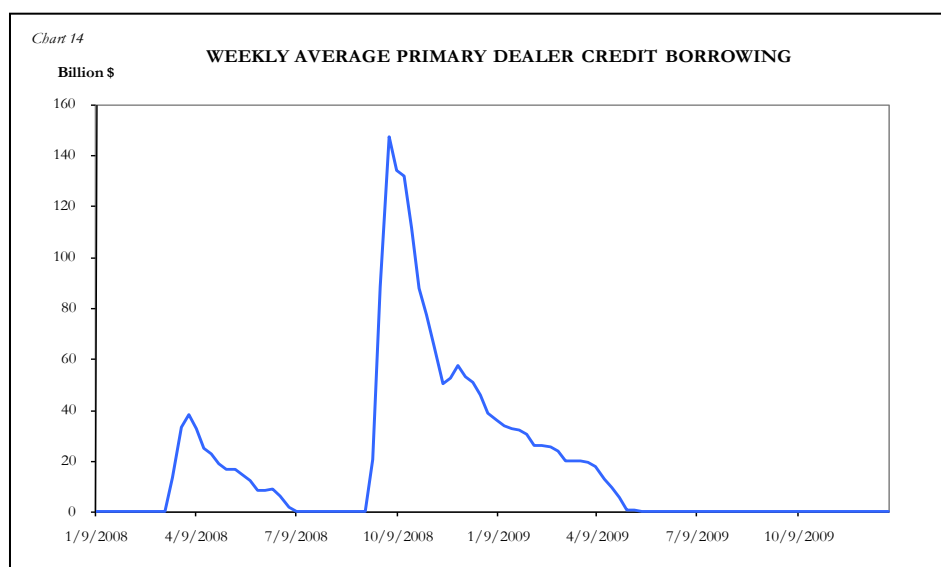
As a precautionary measure, the Federal Reserve also established reciprocal foreign-currency liquidity swap lines in April 2009 with the Bank of England, the European Central Bank, the Bank of Japan, and the Swiss National Bank. If drawn upon, the foreign-currency swap lines would support the operations of the Federal Reserve to address financial strains by providing liquidity to U.S.

²¹ The FOMC authorized dollar liquidity swap lines with the European Central Bank and the Swiss National bank in December 2007 in conjunction with the authorization of the TAF. Subsequently, the FOMC authorized dollar liquidity swap lines with additional central banks.

institutions in amounts of up to £30 billion (sterling), €80 billion (euro), ¥10 trillion (yen), and CHF 40 billion (Swiss francs). The foreign currency liquidity swap lines have not been utilized and both the U.S. dollar and foreign-currency liquidity swap lines are scheduled to expire on February 1, 2010.

Primary Dealer Credit Facility (PDCF)

The PDCF was created by the Board of Governors in 2008 under Section 13(3) of the Federal Reserve Act to provide backup overnight funding to primary dealers and to help foster improved conditions in financial markets more generally. With a balance of \$40 billion in loans, the PDCF began the year far below its October 2008 peak level. The balance rapidly declined during the first part of the year and on May 13, 2009 reached a zero balance (Chart 14). On February 3, the Federal Reserve announced the extension of the PDCF to October 30, 2009, from its previous expiration of April 30. On June 25, the facility was once again extended through February 1, 2010. The current expiration of February 1, 2010 was reaffirmed in December 2009.



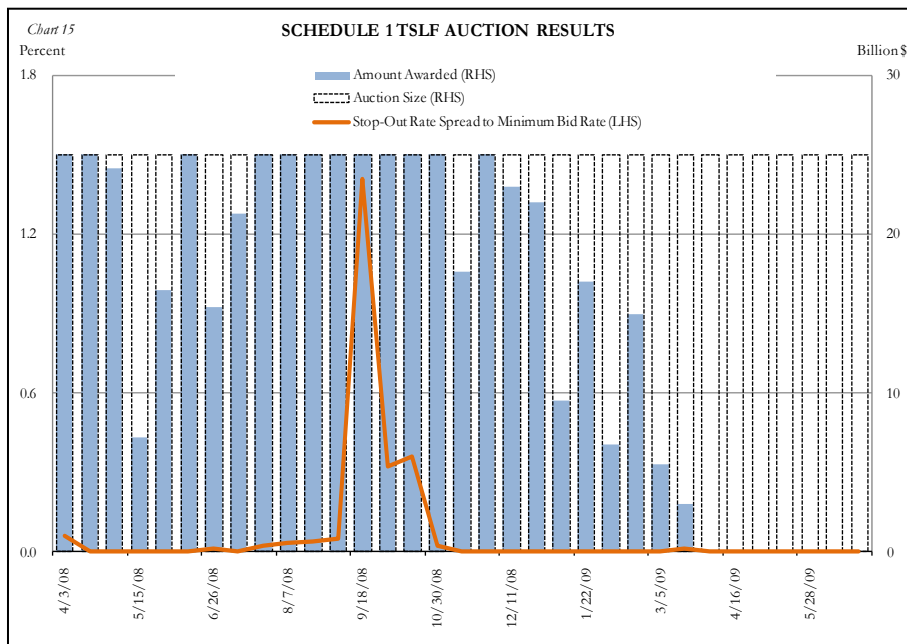
Term Securities Lending Facility (TSLF)

The TSLF was authorized in March 2008 by the Board of Governors under Section 13(3) of the Federal Reserve Act to promote liquidity in the financing markets for Treasury and other collateral and to improve the functioning of financial markets more generally. The facility offered two loan types, distinguished by the list of eligible collateral. TSLF Schedule 1 collateral as of year-end included OMO-eligible U.S. Treasury securities, agency debt, and agency MBS, with the minimum fee set to 0.10 percent. The eligible collateral list for Schedule 2 auctions includes all Schedule 1 eligible collateral, plus investment grade corporate debt securities, investment grade municipal

securities, investment grade mortgage backed securities, and investment grade asset backed securities. The minimum fee rate for Schedule 2 auctions was set at 0.25 percent.

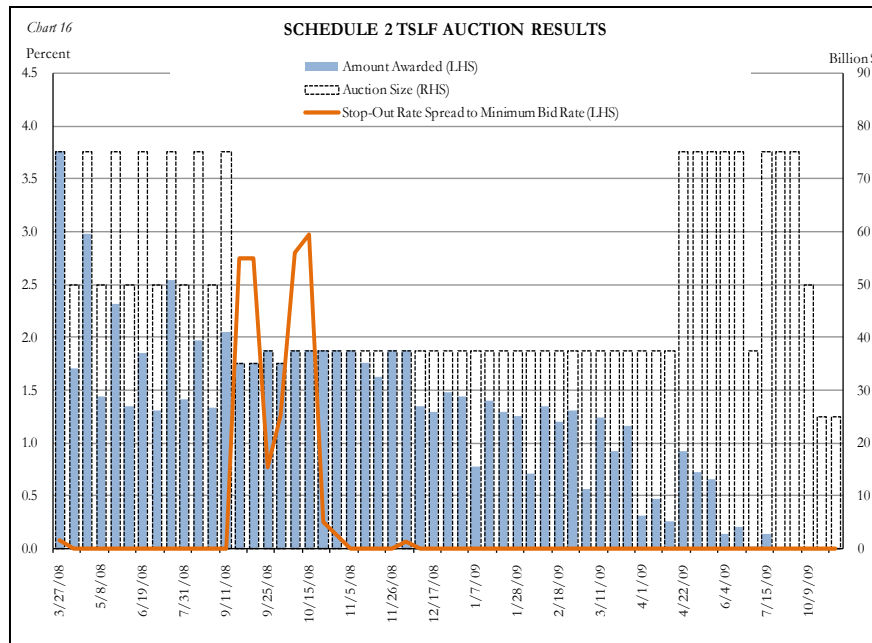
On February 3, 2009, the Federal Reserve announced the extension of the TSLF through October 30, 2009 from April 30, 2009. Given improvements in financing market conditions and in an effort to increase the efficiency of the TSLF, the Federal Reserve reduced the frequency of Schedule 2 auctions to a bi-weekly auction schedule in April and May. Reflecting the deleveraging by primary dealers and continuing improvements in secured funding market conditions, on June 25, the Federal Reserve suspended Schedule 1 TSLF auctions, reduced the size and frequency of Schedule 2 TSLF auctions, and extended the TSLF further to February 1, 2010. The 2010 expiration date was reaffirmed in December 2009.

Following the March quarter-end, improvements in term markets for agency debt and agency MBS securities made it more economical for dealers to finance Schedule 1 type collateral outside of the program, as the spread between Treasury general collateral rates and agency MBS 1-month repo rates narrowed to well below the TSLF Schedule 1 minimum fee of 10 basis points. As such, the TSLF Schedule 1 auction amounts fell to zero by April (Chart 15).



Improvements in term funding for lower quality assets contributed to reduced participation in TSLF Schedule 2 auctions. Deleveraging by primary dealers and thus smaller dealer balance sheets resulted

in a reduced need to finance Schedule 2-eligible collateral via the TSLF. At the same time, increased willingness among dealer clients to fund lower quality collateral for term contributed to the narrowing of the spread between investment-grade corporate and Treasury general collateral rates, nearing the TSLF schedule 2 minimum fee of 25 basis points. The TSLF Schedule 2 operations received no participation after the July 16, 2009 auction (Chart 16).



As part of the TSLF, the Term Securities Lending Facility Options Program (TOP) was implemented in July 2008 and offered options to the primary dealers to draw upon short-term, fixed rate TSLF loans from the SOMA portfolio in exchange for program-eligible collateral. The program was intended to enhance the effectiveness of the TSLF by offering added liquidity over periods of heightened collateral market pressures, such as quarter-end dates. In 2009, the Federal Reserve conducted two TSLF Schedule 2 TOP operations. The minimum options fee rate was set at 1 basis point. Given weak demand, on June 25, 2009, the Federal Reserve suspended the TSLF Options Program, effective with the maturity of outstanding June TOP options. Options sold in the TSLF Schedule 2 TOP operations spanning the March and June quarter ends were not exercised and the two TOP operations of 2009 were undersubscribed. The TOP program is also scheduled to expire on February 1, 2010.

*Asset-Backed Commercial Paper Money Market Mutual Fund Lending Facility (AMLF)*²²

The AMLF, authorized by the Board of Governors under Section 13(3) of the Federal Reserve Act, became operational on September 19, 2008, to extend non-recourse loans at the primary credit rate to U.S. depository institutions and bank holding companies to finance their purchase of high-quality asset-backed commercial paper (ABCP) from money market mutual funds. The outstanding balance of \$24 billion at the beginning of 2009 steadily declined during the first part of the year. In April, the terms and conditions of the AMLF were modified to exclude ABCP placed on negative watch by any ratings agency. Subsequent to this modification, Standard & Poor's (S&P) placed 23 financial institutions, some of which were ABCP program sponsors, on negative watch. Due to heightened credit concerns ahead of the release of the SCAP results and the potential for downgrade or a "negative watch" assignment to ABCP programs, money market funds preemptively pledged \$28.5 billion in ABCP to the AMLF between April 24 and May 8, 2009. Subsequent to this activity, no new ABCP programs were pledged to the AMLF and a zero balance was reached in October 2009.

On February 3, the Federal Reserve extended the AMLF through October 30, 2009, from its previous expiration date of April 30, 2009. On June 25, the facility was extended again through February 1, 2010, a date which was reaffirmed in December 2009 by the FOMC. A program modification was also approved which established a redemption threshold whereby depository institutions and bank holding companies can only pledge ABCP to the AMLF sold by a money market fund if that fund has experienced outflows of at least 5 percent of net assets in a single day or at least 10 percent of net assets within the prior five business days.

Money Market Investor Funding Facility (MMIFF)

The MMIFF, authorized by the Board of Governors under Section 13(3) of the Federal Reserve Act, was announced on October 21, 2008, and became operational on November 24, 2008. Under the MMIFF, the Federal Reserve offered senior secured funding to a series of special purpose vehicles to facilitate an industry-supported private-sector initiative to finance the purchase of eligible commercial paper and certificates of deposit from eligible U.S. money market mutual funds. In January 2009, the set of institutions eligible to participate in the MMIFF was expanded from U.S. money market mutual funds to other money market investors, including U.S. based securities-lending cash-collateral reinvestment funds, portfolios, and accounts; and U.S.-based investment funds that operate in a manner similar to money market mutual funds. Additionally, several economic parameters of the MMIFF were adjusted to enable the program to remain a viable source of backup liquidity for money

²² The AMLF was operated by the Federal Reserve Bank of Boston.

market investors even at low levels of money market interest rates. On February 3, 2009, the MMIFF was extended through October 30 2009, from its previous expiration date of April 30. Eligible institutions never participated in the MMIFF, and the program expired on October 30, 2009, with a zero balance.

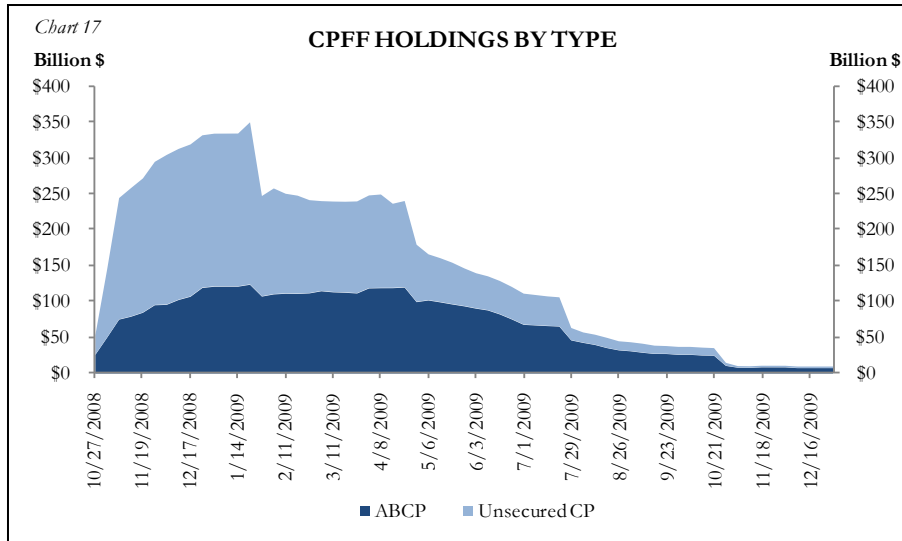
E. Targeted Lending Programs Intended to Address Dysfunctions in Key Credit Markets

In order to support financial markets and economic conditions more generally, two facilities were announced or introduced in 2008, and remained in effect through 2009, to address dysfunctions in key credit markets by providing loans to both nonfinancial and financial borrowers. These facilities included the Commercial Paper Funding Facility and the Term Asset Backed Lending Facility.

Commercial Paper Funding Facility (CPFF)

The CPFF, authorized by the Board of Governors under Section 13(3) of the Federal Reserve Act, provides a liquidity backstop to U.S. issuers of commercial paper through a specially created limited liability company that purchases three-month unsecured and asset-backed commercial paper from eligible issuers using financing from the Federal Reserve. The facility's holdings grew quickly following its first operations on October 27, 2008, as a result of the severe dislocation in the commercial paper market at that time. Although spreads for both asset-backed and top-tier commercial paper began to contract in late December 2008, stress persisted in the market in early 2009 as concerns about counterparty risk constrained investor demand. As a result, CPFF holdings continued to grow and, by January 2009, the facility had reached a peak of over \$350 billion.

The large amount of issuance to the CPFF shortly after its inception in late October 2008 has resulted in concentrations of maturities at three-month intervals. The first of these maturity concentrations took place at the end of January 2009, when approximately \$245 billion of CPFF holdings came due. By this time, most commercial paper rates prevailing in the market were well below those charged by the CPFF and approximately 40 percent of the maturing paper was not reissued to the facility, resulting in a decrease in CPFF holdings to just under \$260 billion by early February. At its peak, the majority of facility holdings were of unsecured financial commercial paper, but after the first set of maturities, the facility became more evenly split between ABCP and unsecured financial paper, in part because of the pay downs from FDIC guaranteed commercial paper (Chart 17).



The facility experienced three subsequent periods of concentrated issuance and maturities over the course of 2009; these periods occurred at the end of April, July, and October. Each of these three-month intervals resulted in substantial pay downs to the CPFF, reflecting ongoing market improvements, increasing investor demand for commercial paper, and continued spread compression across issuer types and tenors. Although some maturing CPFF paper was reissued to the broader market, a large portion of pay-downs was instead the result of reductions in the size of issuer commercial paper programs as issuers deleveraged or obtained other types of market funding or central bank liquidity. As the facility declined over the course of the year, it became increasingly concentrated in ABCP, and by the end of 2009, CPFF holdings had declined to just under \$10 billion, about 80 percent of which was ABCP. Paper held by the CPFF comprised less than one percent of total outstanding commercial paper in December 2009 after making up more than 20 percent of the market at the beginning of the year.

Originally scheduled to cease purchases on April 30, 2009, the facility has been extended twice in light of continuing strains in the markets. On December 16, 2009, the Federal Reserve announced that it anticipates that the CPFF will expire on February 1, 2010, consistent with the Federal Reserve’s announcement of June 25, 2009.

Term Asset Backed Lending Facility (TALF)

The TALF, authorized by the Board of Governors under Section 13(3) of the Federal Reserve Act, was designed to assist financial markets in accommodating the credit needs of consumers and businesses by facilitating the issuance of asset-backed securities collateralized by a variety of

consumer, business, and commercial real estate loans. Announced on November 25, 2008, the Board of Governors authorized the Federal Reserve to lend up to \$200 billion through the TALF on a non-recourse basis against AAA-rated asset-backed securities (ABS) backed by new and recently originated auto, credit card, student loans and loans guaranteed by the Small Business Administration (SBA). Loan terms of three and five years are offered.

The facility began operations on March 19, 2009, with the first non-mortgage-backed ABS subscription. Between March and May 2009, the Federal Reserve expanded the range of eligible collateral for TALF loans to include (i) ABS backed by loans or leases related to business equipment, vehicle fleet leases, floorplan loans, mortgage servicing advances, and insurance premium finance loans; and (ii) newly issued commercial mortgage-backed securities (CMBS) and certain high-quality “legacy” CMBS issued before January 1, 2009. The first CMBS subscription took place on June 16, 2009.

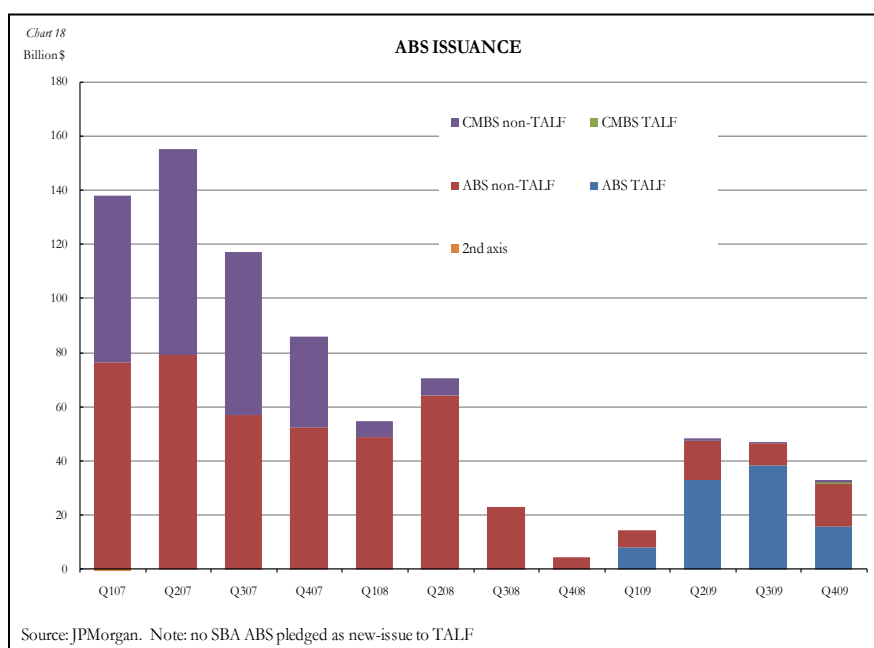
In addition to the requirement that collateral for TALF loans receive AAA ratings from at least two nationally recognized statistical rating organizations, the Federal Reserve conducts a formal risk assessment of all newly issued ABS that might serve as collateral against which TALF loans have been requested. The risk assessment seeks to ensure that TALF collateral complies with high standards for credit quality, transparency and simplicity of structure.

The loans provided through the TALF are non-recourse, meaning that the obligation of the borrower can be discharged by surrendering the collateral to the Federal Reserve. However, the TALF program has been designed with a number of important safeguards that help protect against losses. Borrowers commit their own risk capital in the form of haircuts against the collateral, which serve as the borrower’s equity in the transaction and act as a buffer to absorb declines in the collateral’s value. Further protection is provided by the substantial risk premium included in the TALF loan rate charged by the Federal Reserve. Under the TARP, the Treasury will provide up to \$20 billion of credit protection to the Federal Reserve in connection with the TALF.

TALF leverage encouraged asset-backed investors to return to the market, facilitating issuance of ABS and CMBS. During 2009, \$94 billion in newly issued TALF-eligible, AAA-rated non-mortgage-backed ABS came to market, against which investors received \$48 billion in TALF financing. An additional \$4 billion in TALF loans were extended for recently-issued ABS. Total non-mortgage-

backed ABS issuance (excluding ABS backed by SBA-guaranteed loans) in 2009 was \$134 billion versus \$244 billion in 2007.²³

The legacy CMBS program contributed to improvements in the CMBS sector, helping to reduce secondary market volatility while providing \$9 billion in TALF loans. The first newly issued CMBS deal since mid-2008 came to market in November 2009, a \$400 million deal in which investors received \$72 million in TALF financing (Chart 18). TALF-eligible issuance in both consumer ABS and CMBS markets helped to provide pricing benchmarks for non-TALF issuance.



By providing additional liquidity, the TALF contributed to the stabilization and narrowing of secondary market spreads from the historically wide spread levels experienced in the fourth quarter of 2008. In the consumer ABS sector, 5-year AAA prime credit card ABS spreads narrowed from approximately 600 basis points above LIBOR in December 2008 to approximately 60 basis points at year-end 2009. Five-year AAA CMBS narrowed from 1,500 basis points above comparable interest rate swaps to approximately 350 basis points over the same period.

The Federal Reserve initially authorized the offering of new TALF loans through December 31, 2009, but subsequently authorized an extension of the program until March 31, 2010, for loans

²³ In the second half of 2008, total non-mortgage-backed ABS issuance virtually ceased.

against newly issued ABS and legacy CMBS, and until June 30, 2010, for loans against newly issued CMBS.

F. Institution-Specific Facilities

Bear Stearns, JP Morgan Chase, and Maiden Lane LLC

On March 24, 2008, subsequent to the announcement that Bear Stearns would be acquired by JP Morgan Chase, the Federal Reserve announced, after consultation with the Treasury, that it would provide term financing to facilitate the merger. The Federal Reserve Bank of New York formed a limited liability company, Maiden Lane LLC, to acquire a portfolio of assets valued at \$30 billion as of March 14, 2008, financed by \$29 billion in term financing from the Federal Reserve Bank of New York and \$1 billion in subordinated financing from JP Morgan Chase. The financing was extended on June 26, 2008, on a non-recourse basis. The estimated fair value of the portfolio of assets as of September 30, 2009 was \$26.1 billion. Agency MBS comprised \$13.6 billion, or 54 percent of the fair value of the portfolio as of December 31, 2008, and \$17.4 billion, or 67 percent of the fair value of the portfolio as of September 30, 2009.

AIG, Maiden Lane LLC II, and Maiden Lane LLC III

As of December 31, 2008, the \$60 billion revolving credit facility extended to American International Group (AIG) had an outstanding balance of \$36.8 billion plus \$3.7 billion in fees and interest. At that time, the company continued to face significant challenges driven by the rapid deterioration in certain financial markets in the last quarter of 2008 and continued turbulence in the markets generally.

A modification of the financial support was announced on March 2, enhancing the company's capital and liquidity in order to facilitate the orderly completion of the company's global divestiture program. As part of this modification, the interest rate on the revolving credit facility, which was three-month LIBOR plus 300 basis points, was modified by removing the existing floor of 3.5 percent on the LIBOR rate. The Treasury provided a new equity facility, which allowed AIG to draw up to \$29.835 billion in additional funds in exchange for non-cumulative preferred stock under the TARP. In addition, the Treasury exchanged its existing \$40 billion cumulative perpetual preferred shares for new preferred shares with revised terms that more closely resemble common equity and thus improve the quality of AIG's equity and its financial leverage.

On December 1, 2009, in conjunction with the restructuring of the government's assistance to AIG, the outstanding principal balance and the amount available under the revolving credit facility were

reduced by \$25 billion in exchange for preferred interest in two special purpose vehicles, AIA Aurora LLC and ALICO Holdings LC. These two limited liability companies were created to hold all of the outstanding common stock of American Life Insurance Company (ALICO) and American International Assurance Company LTD. (AIA), two life insurance holding company subsidiaries of AIG. AIG will retain control of ALICO and AIA, and the Federal Reserve will have certain disposition and conversion rights with respects to its preferred interest.

As of December 31, 2009, the \$35 billion revolving credit facility extended to AIG had an outstanding balance of \$17.9 billion plus \$5.5 billion in fees and interest.

Maiden Lane LLC II was established to fund the purchase of residential MBS from AIG's securities lending program. When this was funded with a \$19.5 billion loan from the Federal Reserve and \$1 billion from AIG through a contingent purchase price adjustment on December 12, the original securities borrowing facility established on October 8 was terminated. The principal balance of the loan from the Federal Reserve, as of September 30, 2009, was \$16.8 billion. The estimated fair value of the assets held by Maiden Lane LLC II was \$16.2 billion as of the same date.

Maiden Lane LLC III was established to purchase collateralized debt obligations on which AIG had written credit default swaps. This program began on November 25, 2008 and has received \$24.3 billion in credit from the Federal Reserve and \$5 billion from AIG. Consequently, AIG's credit default swap exposure decreased significantly. The principal balance of the loan from the Federal Reserve, as of September 30, 2009, was \$19.9 billion. The estimated fair value of the assets held by Maiden Lane LLC III was \$23.5 billion as of the same date.

Citigroup

In late 2008, Citigroup's financial position deteriorated significantly amid a declining share price and loss of liquidity. Given its widely recognized importance to the maintenance and restoration of financial market stability, the U.S. government entered into an agreement with Citigroup to provide a package of guarantees, liquidity access, and capital. On January 16, 2009, the Treasury's Asset Guarantee Program (AGP) began providing protection against the possibility of unusually large losses on an asset pool of approximately \$301 billion of loans and securities backed by residential and commercial real estate and other such assets, which remained on Citigroup's balance sheet. In conjunction with this arrangement, Citigroup issued \$7 billion in preferred shares to both the Treasury and the Federal Deposit Insurance Corporation (FDIC). The Treasury and FDIC provided loss protection ahead of the Federal Reserve; however, the Federal Reserve stood ready to backstop

residual risk in the asset pool through a non-recourse loan. In addition, Treasury invested \$20 billion in Citigroup from the TARP in exchange for preferred stock.

On December 23, 2009, Citigroup repaid the \$20 billion it received from the TARP to the Treasury. Moreover, the Treasury, the FDIC, the Federal Reserve, and Citigroup terminated the agreement under which the U.S. government agreed to share losses on the pool of originally \$301 billion of Citigroup's assets. The Federal Reserve received a \$50 million termination fee from Citigroup and the Treasury and the FDIC retained \$5.2 billion of the \$7 billion in trust preferred securities as well as warrants for common shares that were issued by Citigroup as consideration for the guarantee.

Bank of America

On January 16, 2009, the U.S. government also entered into an agreement with Bank of America to provide a package of guarantees, liquidity access, and capital. Although a guarantee, similar to that of Citigroup, related to \$118 billion (marked to current market value) of Bank of America's assets was also announced, the term sheet was never executed. On September 21, 2009, Bank of America paid an exit fee in order to terminate the never implemented term sheet. The Federal Reserve's portion of the exit fee was \$57 million.

III. CHANGES TO THE FEDERAL RESERVE BANK'S BALANCE SHEET

Composition of the Balance Sheet at the End of 2009

At the start of 2009, the balance sheet primarily reflected the outstanding balances of several liquidity and credit facilities created in response to the financial market crisis. However, as 2009 progressed and market dislocations eased, usage of such facilities waned and their balances declined. Offsetting this decline was an increase in the SOMA portfolio, driven primarily by the LSAP programs discussed herein. As such, by year-end the size of the Federal Reserve's balance sheet remained relatively unchanged at the historically high level of \$2.2 trillion, although its composition changed significantly (Table 3). The magnitude of LSAPs, coupled with the winddown of the Treasury's Supplemental Financing Program (SFP) balance, drove reserve balances higher by \$165 billion to end the year above \$1 trillion.

Table 3

Consolidated Statement of Condition of All Federal Reserve Banks
(\$ billions)

<i>Assets</i>	As of 12/31/2008	As of 12/30/2009	<i>Liabilities</i>	As of 12/31/2008	As of 12/30/2009
Securities	496	1845	Reserve Balances of Banks	860	1025
Treasuries	476	777	Excess Balances	838	998
Bills	18	18	Required Op Balances	22	27
Notes and Bonds, Nominal	410	708	Federal Reserve Banknotes	853	890
Notes and Bonds, II	41	45	Treasury Balances at FRB	106	150
Inflation Compensation	6	6	Treasury SFP	259	5
Federal Agency	20	160	Foreign RP Pool	88	70
MBS	-	908	Reverse RPs	0	0
memo item: securities earmarked for TSLF and TOP	200	25	Other Deposits	21	27
Repos	80	0	Foreign Deposits	1	2
Conventional	0	0	Other Liabilities	34	16
Single-tranche 28-day	80	0	Capital	42	52
Swap Agreements	554	10			
Loans	644	166			
TAF	450	76			
Other Credit (AIG)	39	22			
PDCF	37	0			
PCF/SCF	94	20			
AMLF (Boston/ABCP)	24	0			
TALF 1.0	-	39			
TALF 2.0	-	9			
Maiden Lane LLC	27	27			
Maiden Lane LLC II	20	16			
Maiden Lane LLC III	27	23			
Preferred Interests in AIA and ALICO Holdings LLC	-	25			
TALF LLC	-	0			
CPFF	334	14			
Other Assets	82	106			
Special Drawing Rights (SDR)	2	5			
Total Assets	2266	2237	Total Liabilities and Capital	2266	2237
Note: Components may not sum to totals because of rounding.					
Source: Federal Reserve H.4.1 Unaudited Data					

Assets

The asset composition shifted in 2009, as declines in the TAF, outstanding reciprocal dollar swap agreements, PDCF, AMLF, and CPFF balances were largely replaced by increases in the security holdings as a result of the LSAP programs. On aggregate, however, total assets declined by \$29 billion from December 31, 2008 to December 30, 2009.

Liabilities

The Treasury's SFP balance declined by \$254 billion to end the year at a balance of \$5 billion. Much of this decline was offset by an increase of \$44 billion in the Treasury's general operating balance held at the Federal Reserve and a \$160 billion increase in excess reserve balances over the year. The SFP program is further discussed below in section V.E.

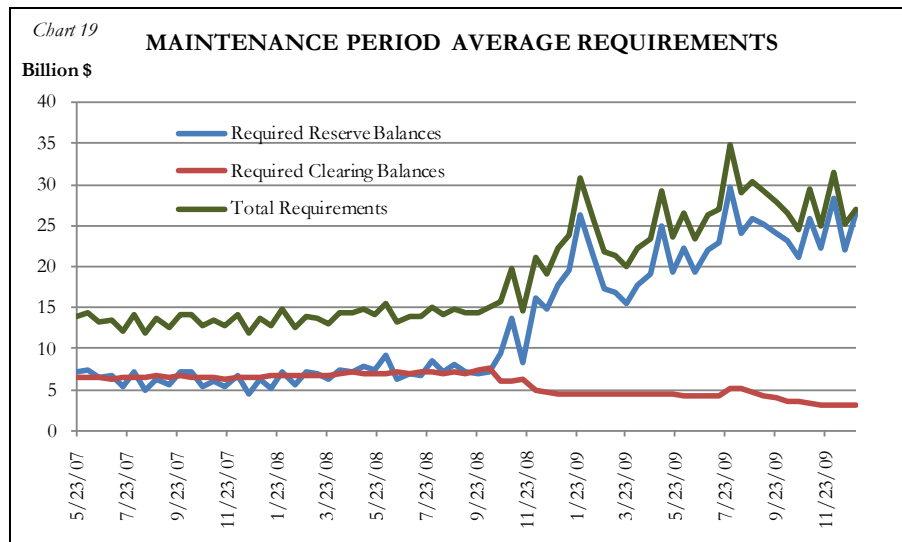
IV. BANKS' DEMAND FOR RESERVE BALANCES

Total demand for Fed balances can be broken down into two components: the portion needed to satisfy reserve requirements and the portion held in excess of these requirements.

A. Total Balance Requirements

A bank's total balance requirement is the average level of balances it must hold at its Reserve Bank over a two-week maintenance period to meet reserve requirements and contractual clearing balance requirements. Required reserve balances equal the portion of reserve requirements not met with vault cash. Contractual clearing balances are balances that the institution agrees to hold at the Federal Reserve for payment clearing purposes.²⁴

Required reserve balances remained at historically high levels in 2009 driven by low short-term interest rates, increases in demand deposit account balances due to the an extension of FDIC insurance on non-interest earning deposits exceeding \$250,000, and interest on reserves reducing the incentive for banks to shift excess balances into other "sweep accounts." Additionally, depository institutions have reduced their usage of contractual clearing balances. The introduction of interest on excess reserves has removed the incentive for depository institutions to establish contractual clearing balances as an economical way to cushion their reserve accounts against late day funding surprises (Chart 19).

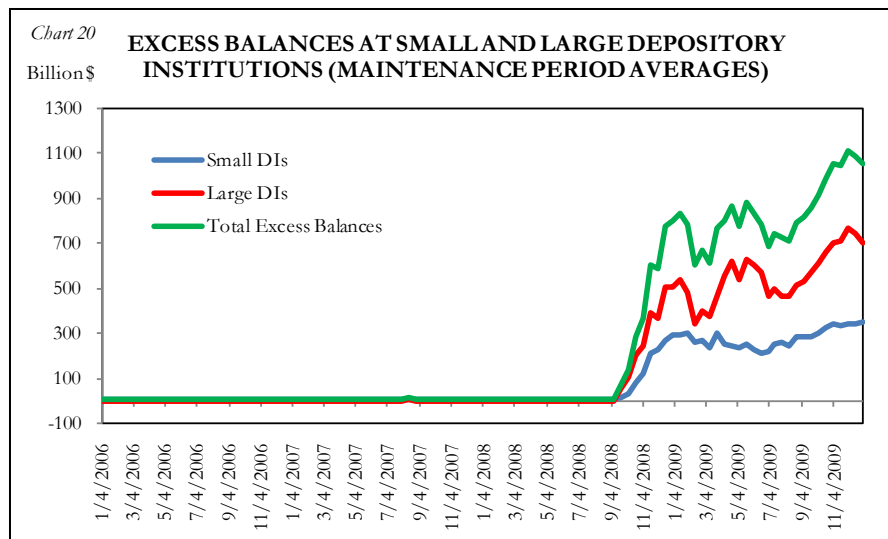


B. Excess Balances

Balances held by institutions over a maintenance period that are above the level needed to meet their total requirements are considered excess balances. The expansion of the Fed's balance sheet,

²⁴ The balance requirements may be affected by the application of "as-of" adjustments. Such adjustments may be made to correct Reserve Bank accounting transaction errors, to correct reporting errors (including deposit reporting errors), to recover float incurred by an institution, or to address other circumstances. Required reserve balances, contractual clearing balance requirements, and most as-of adjustments are known at the start of each maintenance period, which facilitates the Desk's estimation of the overall demand for Fed balances.

however, resulted in period-average excess levels that exceeded \$1 trillion for the first time in October 2009 and were above that mark during the maintenance period ending December 30, 2009 (Chart 20).



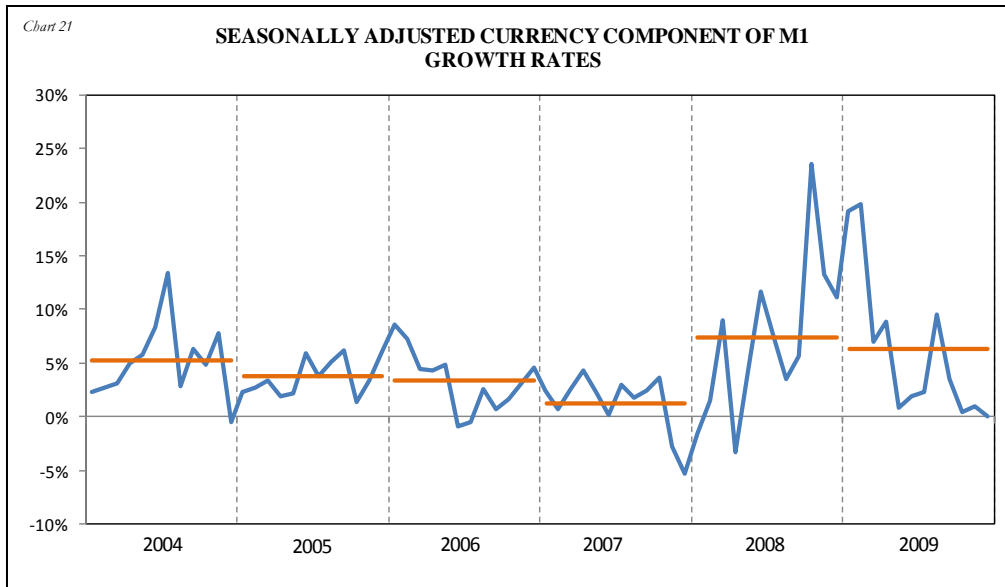
V. FACTORS AFFECTING THE SUPPLY OF RESERVE BALANCES

The supply of Fed balances is determined by the size of the Federal Reserve’s assets and the levels of the various autonomous factors on the Federal Reserve’s balance sheet over which the Desk has little or no control. The currency liabilities of the Federal Reserve (Federal Reserve notes) comprise the largest of these traditional autonomous factors. Other factors are not as large, but can contribute significantly to changes in net autonomous factor levels and volatility. Among these are the Treasury’s general account balance, the Foreign RP pool, and Federal Reserve statement float. Together, these factors drained \$107 billion during 2009.

A. Federal Reserve Notes Outstanding

Federal Reserve notes increased by \$34.3 billion, or 4 percent, during 2009. Much of this increase occurred early in the year and reflected a surge in currency demand that began in mid-2008. Staff estimates indicate the surge started with strong demand for U.S. currency in Latin America and Eastern Europe. It continued into early 2009, by which time it was aided by stronger demand within the U.S. that was response to the severe financial strains that emerged in the fall of 2008.

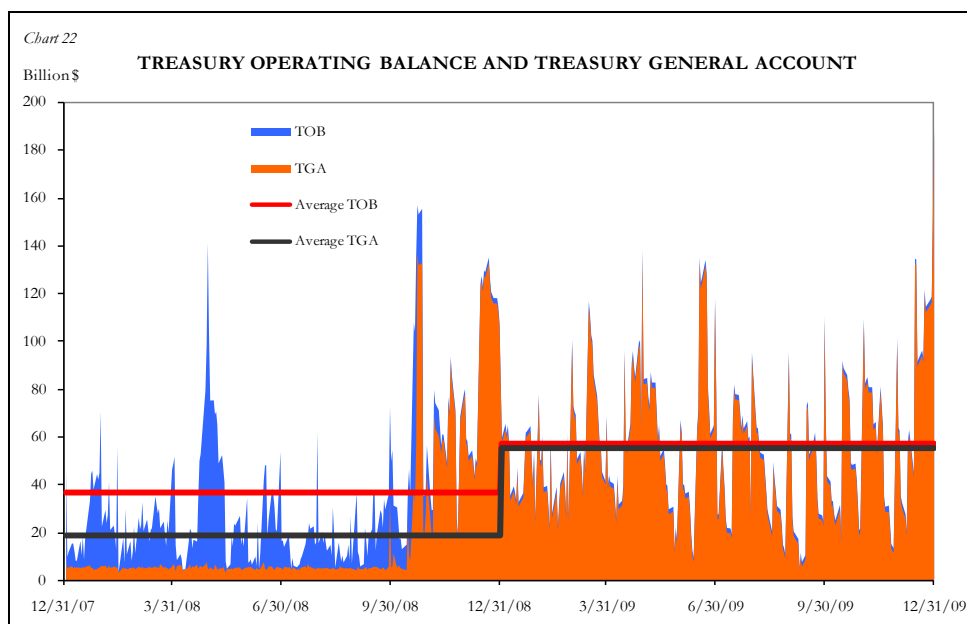
Currency growth dropped off in late 2009 (Chart 21). (This series is the seasonally adjusted currency component of M1.) The low rates at the end of 2009 were similar to the rates at which currency grew during 2007. For the year, however, currency grew by 4.3 percent.



B. Treasury's Balance at the Fed

The Treasury General Account (TGA) and Treasury's Operating Balance (TOB)²⁵ were on average \$37 billion and \$21 billion higher, respectively, in 2009 than in 2008, because of a change in the management of Treasury's balances that occurred in October 2008 (Chart 22).

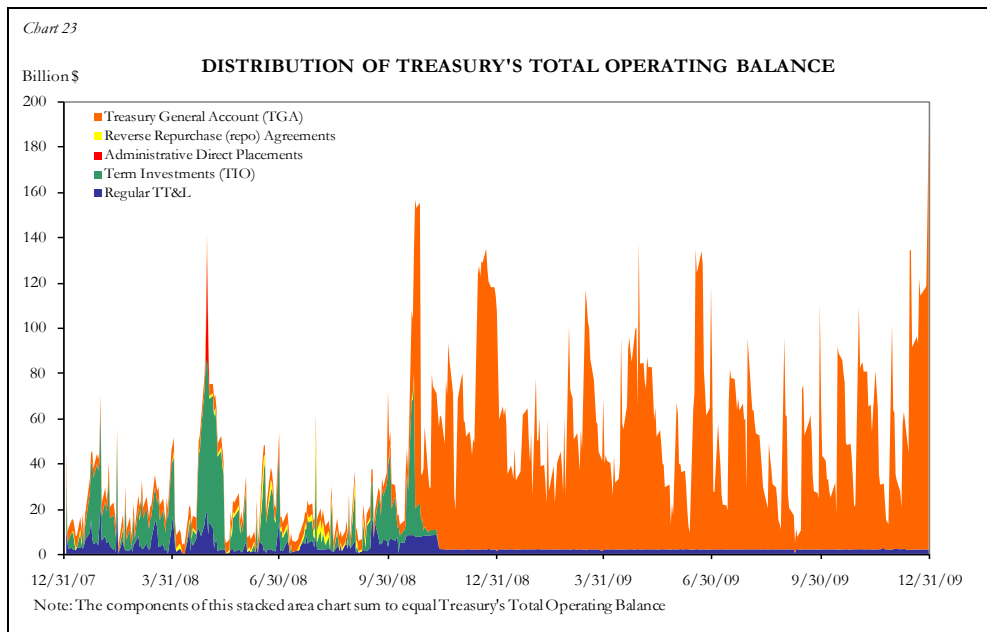
²⁵ Treasury's TOB is defined as funds held in the Treasury's account with the Federal Reserve (the Treasury General Account or TGA) plus balances held in Treasury Tax and Loan (TT&L) note accounts at commercial banks, which includes the term investment option (TIO) and reverse repurchase (repo) programs. TOB figures provided here exclude funds held in the SFP Account and the Financial Institution Account shown on the Daily Treasury Statement.



During the first 10 months of 2008 the TGA was close to the usual \$5 billion target level despite lower TT&L capacity. The Treasury managed the TGA mainly by layering TIO auctions and making large administrative direct placements²⁶ during periods when it was flush with cash. Note that the Treasury was able to maintain a \$5 billion target during late April 2008 even though the TOB spiked to \$140 billion. In October 2008, Treasury began experiencing difficulty maintaining the usual \$5 billion TGA target as the TOB swelled in anticipation of TARP-related payments. As shown in the graph above, Treasury stopped making most investments in late October and kept almost all of its funds in the TGA beginning in November.

Treasury continued keeping most of its funds in the TGA throughout 2009 and placed just \$2 billion in regular TT&L. As a consequence the TGA in 2009 was very volatile. It swelled when the Treasury securities auctions settled and on tax payment dates, and it declined when large payments were made. Large TARP payments and receipts also contributed to volatility in the TGA (Chart 23).

²⁶ Treasury made several large direct administrative placements during 2008 with TT&L depositories. The rate and timing of these placements were arranged with several TT&L banks that agreed to hold additional collateral to back these placements.

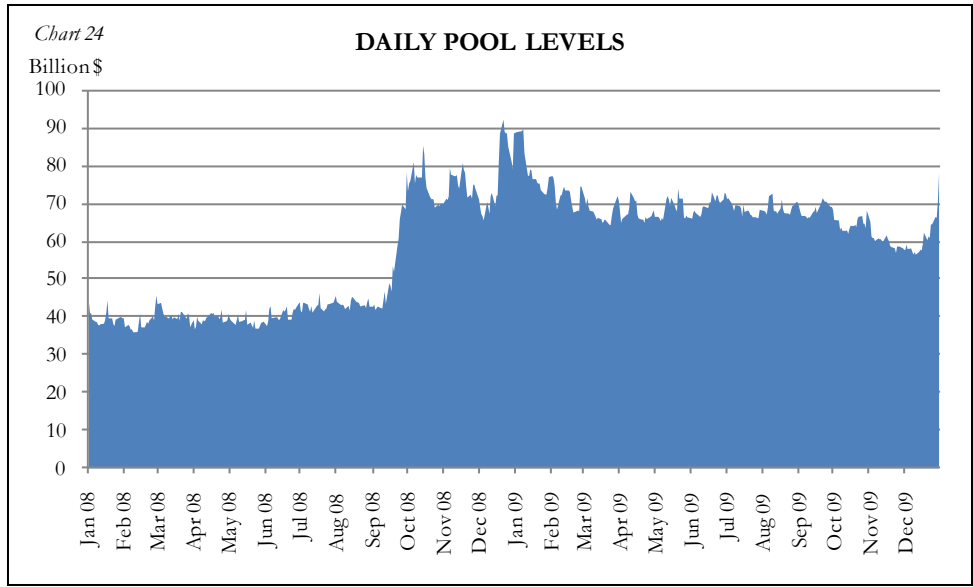


During 2009 the TT&L rate was zero and Treasury placed \$2 billion in TT&L accounts in order to keep the program operational should it decide to make greater use of it in the future. In contrast to 2008, no Treasury funds were invested as Reverse Repurchase Agreements, Administrative Direct Placements or Term Investments. However, Treasury earned an implicit return by keeping funds in the TGA, since TGA balances reduce the level of excess reserves and thus reduce the payment of interest to banks.

C. Foreign RP Pool

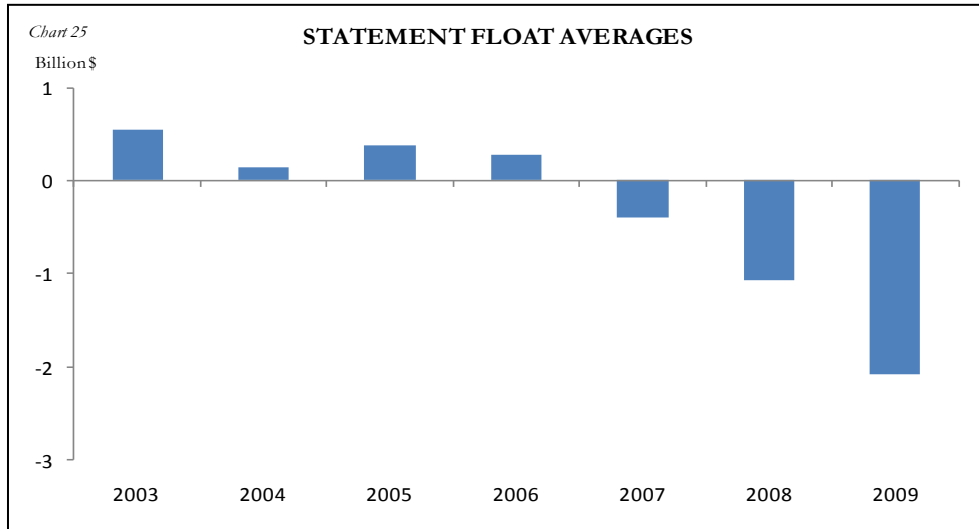
The foreign RP pool (Pool) comprises overnight repurchase agreements between the Federal Reserve and its foreign central bank and international customers, which help customers manage their daily liquidity needs. In a Pool transaction, the Federal Reserve obtains funds from one of its customers in exchange for assets held in the SOMA. Increases in the Pool drain reserves balances as customers move funds from the banking system to accounts at the Federal Reserve.

The Pool decreased by roughly 30 percent during 2009 as customers removed funds they added to their accounts following the market disruptions that emerged in the fall of 2008. Despite the decrease, the Pool was 25 percent larger at the end of 2009 than it was prior to the onset of the financial crisis (Chart 24).



D. Federal Reserve Float

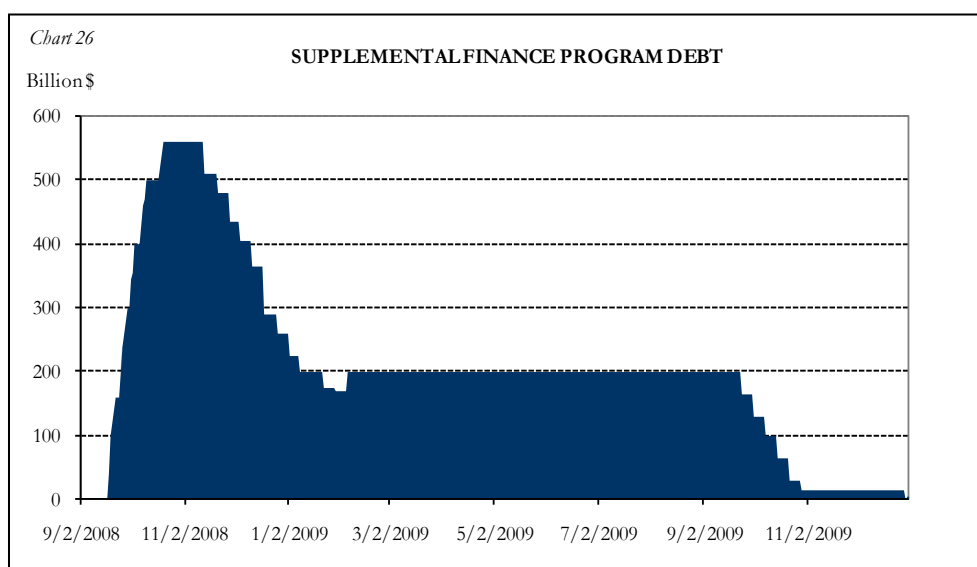
Federal Reserve statement float continued to decline in 2009. Float levels began to trend downward in 2006 as banks adapted to electronic check processing made possible by the Check 21 Act. Electronic processing reduces statement float by reducing delays stemming from the movement of paper checks, and the continuing trend toward lower float levels suggests ongoing improvement in the efficiency with which checks are processed (Chart 25).



E. Supplemental Finance Program (SFP)

The SFP began in September 2008 with the aim of draining reserves from the banking system by having Treasury auction Treasury bills and placing the proceeds into an account held with the

Federal Reserve. The SFP debt balance grew rapidly in size to reach \$560 billion by October 2008. At that time the Treasury grew concerned about reaching the debt ceiling and in November announced that the outstanding level of SFP debt would be decreased “to preserve flexibility in the conduct of debt management policy in meeting the government’s financing needs.” Following the announcement, SFP debt was decreased significantly to \$200 billion by early February 2009, and held constant into the third quarter of 2009. During September 2009, renewed Treasury concerns over the debt ceiling caused a further decrease in the SFP balance to \$15 billion. The \$15 billion debt rolled over once and then matured on December 29, 2009. On December 30, Treasury settled \$5 billion of SFP bills after a \$290 billion increase in the debt ceiling was signed into law (Chart 26).



VI. TRADING IN THE FEDERAL FUNDS AND REPO MARKETS

A. The Federal Funds Market

The zero to 25 basis point target range for the federal funds rate established by the FOMC in December 2008 remained in effect in 2009. On each trading day, the majority of fed funds transactions occurred within the target range, with only a small volume above the range. As a result, all of the daily fed funds effective rates for the year remained within the target range absent of any intervention by the Desk to add or drain reserves through a repo or reverse repo operation (Chart 27). With extraordinary levels of reserves in the banking system, DIs eligible to earn IOER rarely needed to buy fed funds to prevent their accounts at the Federal Reserve from being overdrawn. Additionally, with IOER, these institutions held excess funds at the Federal Reserve rather than sell them at rates below IOER. Consequently, institutions not eligible for IOER (such as GSEs) were the primary sellers of fed funds during 2009, generally at rates well below the high end of the target range. Although some DIs took advantage of this arbitrage opportunity, market participants broadly

reported that this activity was limited and brokered fed funds volumes were reportedly well below their historical levels during 2009. Given these dynamics, trading ranges were fairly predictable and stable for much of the year (Chart 27, Table 4, Charts 28 and 29).

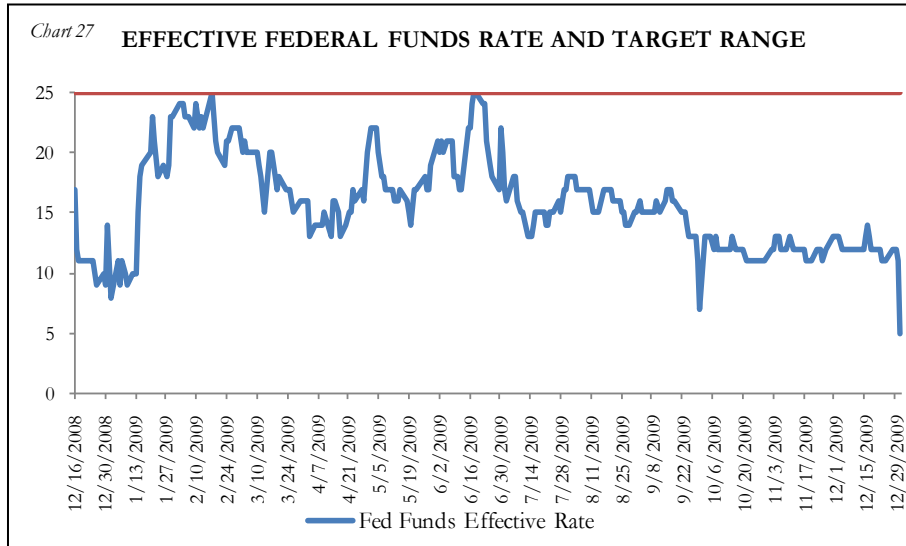
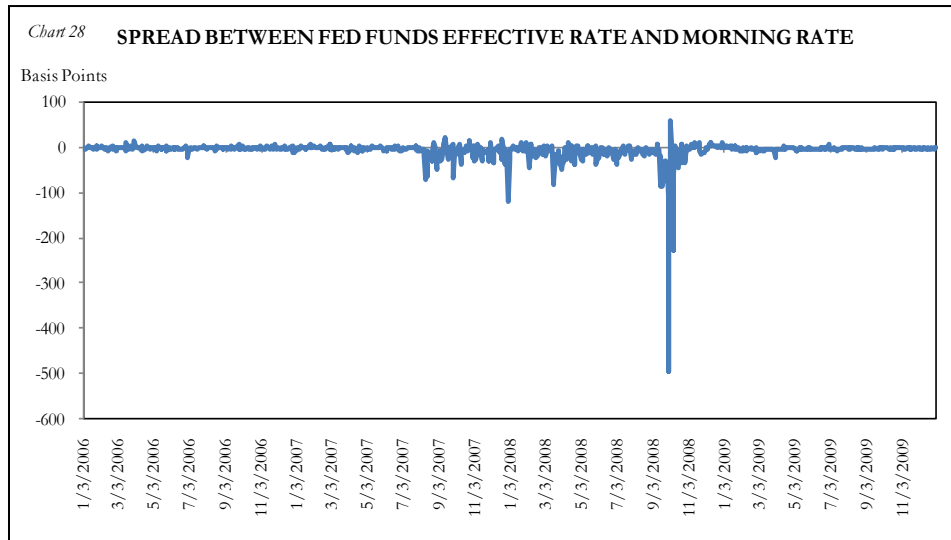


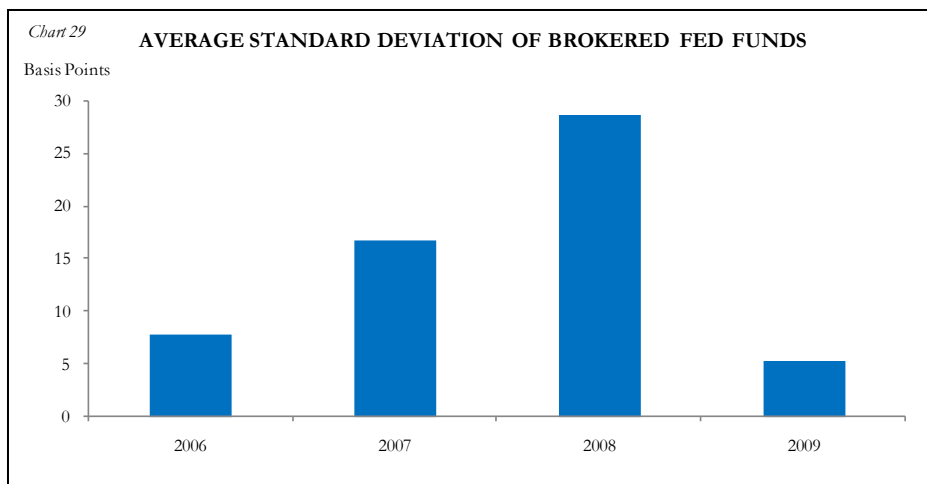
Table 4

FEDERAL FUNDS RATE BEHAVIOR (BASIS POINTS)

All Days	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
<i>Intraday Standard Deviation</i>							
Median	4	3	4	5	9	20	5
Average	5	4	7	7	16	28	5
 Daily Trading Ranges							
Median	25	19	38	50	88	150	33
Averages	33	30	55	77	142	188	39
 Absolute Deviation of Effective Rate from Target							
Median	2	1	2	2	3	7	-
Averages	4	3	5	3	7	21	-
 High Payment Flow Days*							
<i>Intraday Standard Deviation</i>							
Median	6	4	7	7	11	32	5
Average	8	7	9	12	23	47	6
 <i>Absolute Deviation of Effective Rate from Target</i>							
Median	6	4	7	3	5	12	-
Averages	8	4	9	5	11	28	-

*High payment flow dates include the first and last business days of each month, and the first business day after the 14th of each month.





Changes to Regulation D

On July 2, 2009, the Board of Governors modified Regulation D to (1) liberalize the types of transfers that consumers can make from savings deposits; (2) authorize the establishment of Excess Balance Accounts (EBAs); and (3) prohibit the payment of IOER held by respondents on a pass-through basis with an interest-ineligible correspondent. The new transfer rules loosened a three-decades-old restriction on the number of transfers that could be made from a savings deposit by check, debit card, or similar third-party transfers by raising the limit to six transfers per month to three. EBAs, which hold the excess balances of one or more interest-eligible institutions and are managed by an agent—which may be the participants’ pass-through correspondent—was designed to alleviate pressures on correspondent-respondent business relationships. The prohibition on the payment of IOER held with ineligible pass-through correspondents was designed to ensure compliance with statutory intent.

End of Quarter and End of Year Dynamics in the Fed Funds Market

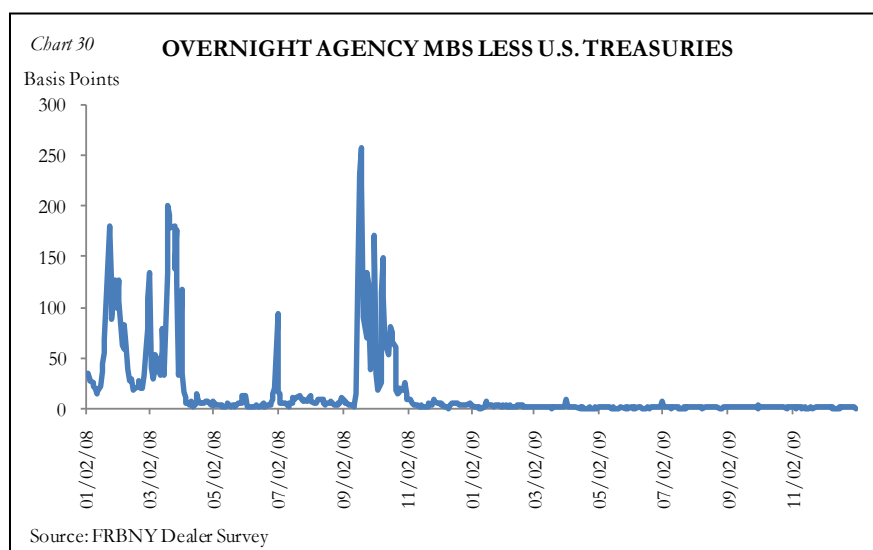
Although trading on quarter-end days exhibited heightened volatility relative to other trading days, the effective rate on those days averaged a bit lower than on other days as DIs reduced their activity in the fed funds market in an effort to manage their balance sheets for financial statement reporting days. On June 30, quarter-end dynamics were slightly exacerbated by the FDIC special assessment fee²⁷ of 5 basis points on insured depository institutions’ assets, less Tier 1 capital, as of June 30th. On that day, fed funds traded at exceptionally low levels for much of the day as banks sought to reduce the size of their balance sheets to minimize the impact of the special assessment fee. Notable exceptions occurred late in the session when a DI paid as high as 7 percent for fed funds, albeit on

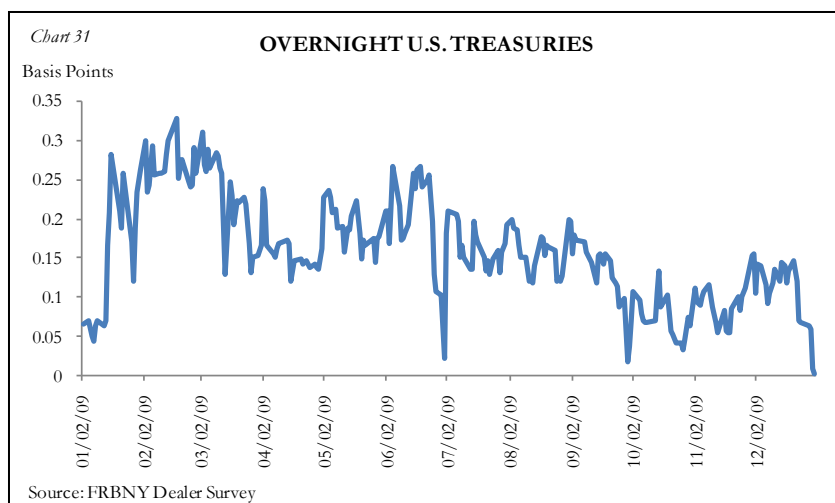
²⁷ The FDIC applied this “special assessment” fee in order to replenish its depleted Deposit Insurance Fund.

light volume. Softer rates on fed funds prevailed on September 30 and December 31 as well, resulting in the lowest ever fed funds effective rates of 0.07 percent and 0.05 percent, respectively.

B. The Treasury and Agency General Collateral Repo Markets

Following a highly tumultuous 2008 during which ongoing concerns about counterparty credit risk and increased risk aversion led to heightened demand for Treasury collateral, trading in the Treasury, agency, and agency MBS General Collateral repo markets was relatively stable in 2009. Whereas spreads between OMO-eligible collateral types widened significantly in 2007 and 2008, overnight and 1-month spreads remained tight and stable during 2009 (Charts 30 and 31). The size of the market did not fully rebound during the year, with some participants estimating that overall GC repo volumes remained 20 to 25 percent below pre-crisis levels. Notwithstanding the large amount of Treasury coupon security issuance in 2009, the Desk's Treasury, agency debt and agency MBS LSAPs during the course of the year added reserves to the banking system and, along with the gradual decline of the Treasury's SFP balance, reduced the amount of collateral available to investors. As such, rates on OMO-eligible repo collateral edged lower during the year, with financing rates on Treasury GC largely ranging between 5 and 15 basis points during the fourth quarter.





End of Quarter and End of Year Dynamics in GC Repo Market

The abundance of cash in the market and the gradual reduction in available collateral served to exacerbate typical quarter-end and year-end dynamics. On these dates, dealers typically pare down balance sheets for financial reporting purposes and tend to hold high quality collateral resulting in temporary market dislocations. Exacerbating the temporary dislocations during 2009 were FDIC-related fees that were passed along to depositors on quarter-end dates and the reduction in general collateral available in the market.²⁸ This was particularly evident on the September 30 quarter-end date and the days leading up to and including the December 31 year-end date. On September 30, despite the settlement of \$85 billion in net new Treasury securities all OMO-eligible collateral traded at negative rates in small volume late in the session. The dislocation was temporary, though, as rates returned to positive territory on October 1. However, a similar dislocation developed leading into the year-end. Overnight Treasury GC repo began trading negative on December 29 and reached a low of negative 175 basis points on December 31. Although the negative trading was slightly deeper than anticipated, the volume transacted at such levels was small compared to overall market volume.

Tri-party Reform

In September 2009, the Task Force on Tri-Party Repo Infrastructure (Task Force) was formed under the auspices of the Payments Risk Committee (PRC), a private sector body sponsored by the Federal Reserve Bank. The Task Force's objective is to develop a set of recommendations for improving

²⁸ The FDIC's Transaction Account Guarantee program provides insurance on non-interest bearing deposits in excess of the \$250,000. Participating institutions that benefited from the insurance in 2009 were required to pay an annualized 10 basis point quarterly fee assessed on such deposits in excess of \$250,000 as of the quarter-end date. Many of these institutions passed such fees on to institutional customers who sought to deposit an abnormal amount of cash on such financial reporting days. To avoid this fee, such depositors sought refuge in low-yielding money markets and were willing to engage in repo transactions at negative rates.

and mitigating risks related to tri-party repo transactions, with the primary areas of focus being clearance and settlement arrangements, credit and liquidity risk management practices and tools, and arrangements for facilitating the orderly disposition of collateral in stress scenarios. On December 22, 2009, the Task Force published a Progress Report²⁹ related to its activity to date and indicating that it expects to complete its work during the first quarter of 2010.

²⁹ http://www.newyorkfed.org/prc/report_091222.pdf

APPENDIX A: AUTHORIZATION FOR DOMESTIC OPEN MARKET OPERATIONS

(Amended January 27, 2009)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, to the extent necessary to carry out the most recent domestic policy directive adopted at a meeting of the Committee:

A. To buy or sell U.S. Government securities, including securities of the Federal Financing Bank, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States in the open market, from or to securities dealers and foreign and international accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the System Open Market Account at market prices, and, for such Account, to exchange maturing U.S. Government and Federal agency securities with the Treasury or the individual agencies or to allow them to mature without replacement;

B. To buy or sell in the open market U.S. Government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, for the System Open Market Account under agreements to resell or repurchase such securities or obligations (including such transactions as are commonly referred to as repo and reverse repo transactions) in 65 business days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual counterparties.

2. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to use agents in agency MBS-related transactions.

3. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. Government securities held in the System Open Market Account to dealers at rates that shall be determined by competitive bidding. The Federal Reserve Bank of New York shall set a minimum lending fee consistent with the objectives of the program and apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow. The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York.

4. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York and accounts maintained at the Federal Reserve Bank of New York as fiscal agent of the United States pursuant to Section 15 of the Federal Reserve Act, the Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York (a) for System Open Market Account, to sell U.S. Government securities to such accounts on the bases set forth in paragraph 1.A under agreements providing for the resale by such accounts of those securities in 65 business days or less on terms comparable to those available on such transactions in the market; and (b) for New York Bank account, when appropriate, to undertake with dealers, subject to the conditions imposed on purchases and sales of securities in paragraph 1.B, repurchase agreements in U.S. Government and agency securities, and to arrange corresponding sale and repurchase agreements between its own account and such foreign, international, and fiscal agency

accounts maintained at the Bank. Transactions undertaken with such accounts under the provisions of this paragraph may provide for a service fee when appropriate.

5. In the execution of the Committee's decision regarding policy during any intermeeting period, the Committee authorizes and directs the Federal Reserve Bank of New York, upon the instruction of the Chairman of the Committee, to adjust somewhat in exceptional circumstances the degree of pressure on reserve positions and hence the intended federal funds rate and to take actions that result in material changes in the composition and size of the assets in the System Open Market Account other than those anticipated by the Committee at its most recent meeting. Any such adjustment shall be made in the context of the Committee's discussion and decision at its most recent meeting and the Committee's long-run objectives for price stability and sustainable economic growth, and shall be based on economic, financial, and monetary developments during the intermeeting period. Consistent with Committee practice, the Chairman, if feasible, will consult with the Committee before making any adjustment.

Directive issued on March 17

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase GSE debt, GSE-guaranteed MBS, and longer-term Treasury securities during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Committee anticipates that the combination of outright purchases and various liquidity facilities outstanding will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The Desk is expected to purchase up to \$200 billion in housing-related GSE debt by the end of this year. The Desk is expected to purchase at least \$500 billion in GSE-guaranteed MBS by the end of the second quarter of this year and is expected to purchase up to \$1.25 trillion of these securities by the end of this year. The Committee also directs the Desk to purchase longer-term Treasury securities during the intermeeting period. Over the next six months, the Desk is expected to purchase up to \$300 billion of longer-term Treasury securities. The System Open Market Account Manager and the Secretary will keep the Committee in-formed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

Directive issued on April 29

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase agency debt, agency MBS, and longer-term Treasury securities during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Committee anticipates that the combination of outright purchases and various liquidity facilities outstanding will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The Desk is expected to purchase up to \$200 billion in housing-related agency debt by the end of this year. The Desk is expected to purchase at least \$500 billion in agency MBS by the end of the second quarter of this year and is expected to purchase up to \$1.25 trillion of these securities by the end of this year. The Desk is expected to purchase up to \$300 billion of longer-term Treasury securities by the end of the third quarter. The System Open Market Account

Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

Amendment to Authorization on June 24

3. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. Government securities and securities that are direct obligations of any agency of the United States, held in the System Open Market Account, to dealers at rates that shall be determined by competitive bidding. The Federal Reserve Bank of New York shall set a minimum lending fee consistent with the objectives of the program and apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow. The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York.

Directive issued on June 24

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase agency debt, agency MBS, and longer-term Treasury securities during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Committee anticipates that the combination of outright purchases and various liquidity facilities outstanding will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The Desk is expected to purchase up to \$200 billion in housing-related agency debt by the end of this year. The Desk is expected to purchase up to \$1.25 trillion of agency MBS by the end of the year. The Desk is expected to purchase up to \$300 billion of longer-term Treasury securities by the end of the third quarter. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

Directive issued on August 12

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase agency debt, agency MBS, and longer-term Treasury securities during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to purchase up to \$200 billion in housing-related agency debt and up to \$1.25 trillion of agency MBS by the end of the year. The Desk is expected to purchase about \$300 billion of longer-term Treasury securities by the end of October, gradually slowing the pace of these purchases until they are completed. The Committee anticipates that outright purchases of securities will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

Directive issued on September 23

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase agency debt, agency MBS, and longer-term Treasury securities during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to complete purchases of about \$300 billion of longer-term Treasury securities by the end of October. It is also expected to execute purchases of up to \$200 billion in housing-related agency debt and about \$1.25 trillion of agency MBS by the end of the first quarter of 2010. The Desk is expected to gradually slow the pace of these purchases as they near completion. The Committee anticipates that outright purchases of securities will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

Directives issued on November 4 and December 16

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to purchase agency debt and agency MBS during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to execute purchases of about \$175 billion in housing-related agency debt and about \$1.25 trillion of agency MBS by the end of the first quarter of 2010. The Desk is expected to gradually slow the pace of these purchases as they near completion. The Committee anticipates that outright purchases of securities will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

APPENDIX B: GUIDELINES FOR THE CONDUCT OF SYSTEM OPEN MARKET OPERATIONS IN FEDERAL AGENCY ISSUES

(Temporarily suspended, January 26, 2009)

In light of its program to purchase large quantities of agency debt and mortgage-backed securities, the Committee voted to suspend temporarily the Guidelines for the Conduct of System Operations in Federal Agency Issues (last amended January 28, 2003).

APPENDIX C: PRIMARY DEALERS

The Federal Reserve Bank of New York trades U.S. government and select other securities with designated primary dealers, which include banks and securities broker-dealers. The role of the primary dealer includes the obligations to: (i) participate consistently as a counterparty to the Federal Reserve in its execution of open market operations as directed by the FOMC, and (ii) provide the Desk with market information and analysis helpful in the formulation of monetary policy. Primary dealers are also required to participate meaningfully in all auctions of U.S. government debt, including an underwriting commitment, and to make reasonable markets for the Federal Reserve when it transacts on behalf of its foreign official account-holders.

During 2009, the number of primary dealers increased to 18 from 17. Changes during the year were as follows:

February 11, 2009	Merrill Lynch Government Securities Inc. was deleted from the list as a result of the acquisition of Merrill Lynch & Co., Inc., by Bank of America Corporation.
June 18, 2009	Jefferies & Company, Inc., was added to the list.
June 26, 2009	Dresdner Kleinwort Securities LLC withdrew its name from the list.
July 8, 2009	RBC Capital Markets was added to the list.
July 27, 2009	Nomura Securities International, Inc. was added to the list.

At the end of 2009, the list of primary dealers included:

BNP Paribas Securities Corp.
Banc of America Securities LLC
Barclays Capital Inc.
Cantor Fitzgerald & Co.
Citigroup Global Markets Inc.
Credit Suisse Securities (USA) LLC
Daiwa Securities America Inc.
Deutsche Bank Securities Inc.
Goldman, Sachs & Co.
HSBC Securities (USA) Inc.
Jefferies & Company, Inc.
J. P. Morgan Securities Inc.
Mizuho Securities USA Inc.
Morgan Stanley & Co. Incorporated
Nomura Securities International, Inc.
RBC Capital Markets Corporation
RBS Securities Inc.
UBS Securities LLC.