Congressional Research Service
Informing the legislative debate since 1914

Federal Reserve: Emergency Lending

Marc Labonte
Specialist in Macroeconomic Policy

September 8, 2015

Congressional Research Service
7-5700
www.crs.gov
R44185

CRS REPORT
Prepared for Members and
Committees of Congress

Summary

The worsening of the financial crisis in 2008 led the Federal Reserve (Fed) to revive an obscure provision found in Section 13(3) of the Federal Reserve Act (12 U.S.C. 344) to extend credit to nonbank financial firms for the first time since the 1930s. Section 13(3) provides the Fed with greater flexibility than its normal lending authority. Using this authority, the Fed created six broadly based facilities (of which only five were used) to provide liquidity to "primary dealers" (i.e., certain large investment firms) and to revive demand for commercial paper and asset-backed securities. More controversially, the Fed provided special, tailored assistance exclusively to four firms that the Fed considered "too big to fail"—AIG, Bear Stearns, Citigroup, and Bank of America.

Credit outstanding (in the form of cash or securities) authorized by Section 13(3) peaked at $710 billion in November 2008. At present, all credit extended under Section 13(3) has been repaid with interest and all Section 13(3) facilities have expired. Contrary to popular belief, under Section 13(3), the Fed earned income of more than $30 billion and did not suffer any losses on those transactions. These transactions exposed the taxpayer to greater risks than traditional lending to banks through the discount window, however, because in some cases the terms of the programs had fewer safeguards.

The Fed's use of Section 13(3) in the crisis raised fundamental policy issues: Should the Fed be lender of last resort to banks only, or to all parts of the financial system? Should the Fed lend to firms that it does not supervise? How much discretion does the Fed need to be able respond to unpredictable financial crises? How can Congress ensure that taxpayers are not exposed to losses? Do the benefits of emergency lending outweigh the costs, including moral hazard? How can Congress ensure that Section 13(3) is not used to "bail out" failing firms? Should the Fed tell Congress and the public to whom it has lent?

The restrictions in Section 13(3) placed few limits on the Fed's actions in 2008. However, in 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (P.L. 111-203) added more restrictions to Section 13(3), attempting to ban future assistance to failing firms while maintaining the Fed's ability to create broadly based facilities. The Dodd-Frank Act also required records for actions taken under Section 13(3) to be publicly released with a lag and required the Government Accountability Office (GAO) to audit those programs for operational integrity, accounting, financial reporting, internal controls, effectiveness of collateral policies, favoritism, and use of third-party contractors.

Some Members of Congress believe that the Dodd-Frank Act did not sufficiently limit the Fed's discretion. In the 114th Congress, legislation—including H.R. 2625, H.R. 3189, and S. 1320—has been introduced that would further modify Section 13(3). On July 29, 2015, H.R. 3189 was ordered to be reported by the House Financial Services Committee. It would raise the threshold for using Section 13(3), tighten the definition of solvency, limit borrowers to financial firms, and provide a formula for setting the interest rate. A Fed governor has opposed further reducing the Fed's discretion under Section 13(3) on the grounds that the Fed needs "to be able to respond flexibly and nimbly" to future threats to financial stability. Although Section 13(3) must be used "for the purpose of providing liquidity to the financial system," some Members of Congress have expressed interest in—while others have expressed opposition to—the Fed using Section 13(3) to assist financially struggling entities, including states, municipalities, and territories of the United States.

This report does not discuss lending to banks under the Fed's normal authority or other actions taken by the Fed or federal government during the financial crisis.

Contents

Figures

Tables

Appendixes

Contacts

Introduction

The financial crisis that began in 2007 and deepened in 2008 was the worst since the Great Depression. The federal policy response was swift, large, creative, and controversial, creating unprecedented tools to grapple with financial instability.[1] Particularly notable were the actions taken by the Federal Reserve (Fed) under its broad emergency lending authority, Section 13(3) of the Federal Reserve Act (12 U.S.C. 344). This obscure section of the act was described in a 2002 review as follows: "To some this lending legacy is likely a harmless anachronism, to others it's still a useful insurance policy, and to others it's a ticking time bomb of political chicanery."[2]

Under normal authority, the Fed faces statutory limitations on whom it may lend to, what it may accept as collateral, and for how long it may lend. Because many of the actions it took during the crisis did not meet these criteria, Section 13(3) was used to authorize most of the Fed's emergency facilities created during the crisis to provide credit to nonbank financial firms. More controversially, the Fed also invoked Section 13(3) to prevent the failure of Bear Stearns and American International Group (AIG), two financial firms that it deemed "too big to fail." The Federal Reserve (Fed) also lent extensively to banks through the discount window and newly created facilities and undertook "quantitative easing" (large scale purchases of Treasury and mortgage-backed securities) during the crisis. Because these actions were taken under its normal authority, they are beyond the scope of this report, as are other actions taken by the federal government during the crisis.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (hereinafter, the Dodd-Frank Act; P.L. 111-203) limited the Fed's discretion under Section 13(3), but some Members of Congress believe that these changes were insufficient. This report provides a review of the history of Section 13(3), including its use in 2008. It discusses the Fed's authority under Section 13(3) before and after the Dodd-Frank Act. It then discusses policy issues and legislation to amend Section 13(3).

History of Section 13(3)

One of the main reasons the Fed was created was to act as a "lender of last resort," by providing liquidity in the form of short-term loans to banks through the discount window. The Fed still provides that service today, but the amount of liquidity extended is insignificant typically. Over time, it became expected that banks would meet their short-term borrowing needs through private markets under normal conditions. Discount window lending to banks occurs under the Fed's normal statutory authority.

Nonbank financial firms also face liquidity needs, but the history of Fed lending to nonbanks is much more limited. Section 13(3) has been invoked rarely since it was enacted in 1932. The Fed used it to make 123 loans to nonfinancial firms totaling $1.5 million from 1932 to 1936, until that authority was superseded by new authority (Section 13b, which was subsequently repealed).[3]

---

[1] For an overview, see CRS Report R43413, *Costs of Government Interventions in Response to the Financial Crisis: A Retrospective*, by Baird Webel and Marc Labonte.

[2] David Fettig, *Lender of More than Last Resort*, Federal Reserve Bank of Minneapolis, December 1, 2002, https://www.minneapolisfed.org/publications/the-region/lender-of-more-than-last-resort.

[3] Howard Hackley, *Lending Functions of the Federal Reserve Banks*, Federal Reserve, 1973, p. 130. See also David Fettig, *Lender of More than Last Resort*, Federal Reserve Bank of Minneapolis, December 1, 2002, https://www.minneapolisfed.org/publications/the-region/lender-of-more-than-last-resort; James Dolley, "The Industrial (continued...)

Section 13(3) can also be used to authorize lending to banks. After 1936, the Fed invoked Section 13(3) occasionally to make nonmember banks and credit unions eligible to borrow at the discount window before 1980, when nonmember banks were permitted to access the discount window.[4] Section 13(3) authority was not used to extend credit to nonbanks from 1936 to 2008. This authority was then used extensively beginning in 2008 in response to the financial crisis—in very different ways than it had been used previously.

Use of Section 13(3) in 2008

Section 13(3) was used to authorize multiple actions taken by the Fed when financial conditions worsened at two points in 2008- around the time the investment bank Bear Stearns experienced difficulties in March and following the failure of the investment bank Lehman Brothers in September. Credit extended under Section 13(3) in 2008 can be divided into two broad categories:

1. broadly based facilities to address liquidity problems in specific markets and
2. exclusive, tailored assistance to prevent the disorderly failure of individual firms deemed too big to fail.[5]

Credit outstanding (in the form of cash or securities) under Section 13(3) peaked at $710 billion in November 2008.[6] Currently, all credit extended under Section 13(3) has been repaid with interest and all 13(3) facilities have expired.[7] Contrary to popular belief, under Section 13(3), the Fed earned net income of more than $30 billion (more than half of which is related to AIG[8]) and did not suffer any losses on those transactions.[9] Nevertheless, some of these transactions exposed the taxpayer to greater ex ante risks than the discount window because the terms of the programs had fewer safeguards—in some cases involving non-recourse loans[10] and troubled asset

(...continued)

Advance Program of the Federal Reserve System," *The Quarterly Journal of Economics*, vol. 50, no. 2, February 1936, p. 229.

[4] Nationally chartered banks are required to be members of the Federal Reserve System. State chartered banks have the option of becoming members. Until the Monetary Control Act of 1980 (P.L. 96-221), only member banks were allowed to borrow at the discount window.

[5] For more information, see CRS Report R42150, *Systemically Important or "Too Big to Fail" Financial Institutions*, by Marc Labonte.

[6] Total does not include asset guarantees for Citigroup and Bank of America, under which funds were never used.

[7] One facility, Maiden Lane I, still held more than $1 billion of assets at the end of 2014. It has no debt and is not authorized to purchase additional assets.

[8] In addition to the $30 billion in net income received by the Fed, Treasury received an additional $17.6 billion as net income on the sale of equity that the Fed originally received (and subsequently transferred to the Treasury) as recompense for the Fed's loan to AIG.

[9] The income can be considered to be profits if defined as payments received in excess of principal outlayed. This report does not consider whether the Fed earned economic profits on these transactions. For example, the income from these transactions may have been partially offset by lost income if the Fed offset those facilities by holding fewer Treasury securities on its balance sheet. One study attempts to estimate this effect for the Fed's broadly based facilities (but not for its special assistance to firms deemed "too big to fail.") For Section 13(3) facilities, it estimates that the facilities earned $8.1 billion in interest and fee income, but the "cost of funds" for those programs was $1.1 billion, so the Fed earned $7 billion net income over the life of the programs. See Michael Fleming and Nicholas Klagge, "Income Effects of Federal Reserve Liquidity Facilities," Federal Reserve Bank of New York, *Current Issues in Economics and Finance*, vol. 17, no. 1, 2011, http://www.nyfedeconomists.org/research/current_issues/ci17-1.pdf.

[10] Under a non-recourse loan, the creditor has no right to seek payment beyond the collateral posted in the event that the loan is not repaid.

purchases, for example. The next two sections summarize this experience, with more detail provided in the **Appendix**.[11]

Broadly Based Facilities

The Fed created six broadly based facilities under Section 13(3) in 2008 to extend credit to all eligible borrowers within a particular class of nonbank financial firms or to a particular segment of the nonbank financial market:

- The Term Securities Lending Facility (TSLF) and the Primary Dealer Credit Facility (PDCF) were created to assist primary dealers (a group of investment firms that are the Fed's counterparties for open market operations).
- The Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), the Commercial Paper Funding Facility (CPFF), and the Money Market Investor Funding Facility (MMIFF) were created to support the commercial paper market (the MMIFF was never used).
- The Term Asset-Backed Securities Loan Facility (TALF) was created to support the asset-backed securities (ABS) market.
- provides a summary of the terms and uses of these facilities. The CPFF was the largest facility, and TALF was the smallest. As can be seen in the table, none of these facilities extended credit after 2010.

Table 1 provides a summary of the terms and uses of these facilities. The CPFF was the largest facility, and TALF was the smallest. As can be seen in the table, none of these facilities extended credit after 2010.

[11] For more information, see Federal Reserve, Office of the Inspector General, *The Federal Reserve's Section 13(3) Lending Facilities to Support Overall Market Liquidity*, November 2010, http://oig.federalreserve.gov/reports/FRS_Lending_Facilities_Report_final-11-23-10_web.pdf. See also U.S. Government Accountability Office (GAO), *Federal Reserve System: Opportunities Exist to Strengthen Policies and Processes for Managing Emergency Assistance*, GAO-11-696, July 21, 2011, http://www.gao.gov/new.items/d11696.pdf. The Fed was required to report to Congress on assistance provided pursuant to Section 13(3); these reports are posted at http://www.federalreserve.gov/monetarypolicy/bst_reports.htm. See also the Fed's website *Credit and Liquidity Programs and the Balance Sheet*, available at http://www.federalreserve.gov/monetarypolicy/bst_archive.htm.

Table 1. Broadly Based Facilities Created in 2008 Under Section 13(3)

Usage				Terms and Conditions			
Facility	Loans Outstanding at Peak	Total Income	Number of Participants	Lending Rate/Fee	Recourse/Haircut	Term	Date Announced-Expired
Term Securities Lending Facility (TSLF)	$235.5 billion on Oct. 1, 2008	$0.8 billion	18	Set at auction, with minimum fee of 10 to 25 basis points	Yes/Yes	28 days	Mar. 11, 2008-Feb. 1, 2010
Primary Dealer Credit Facility (PDCF)	$146.6 billion on Oct. 1, 2008	$0.6 billion	18	Rate set equal to Fed's discount rate; fees of up to 40 basis points for frequent users	Yes/Yes	overnight	Mar. 16, 2008-Feb. 1, 2010
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	$152.1 billion on Oct. 1, 2008	$0.5 billion	11 from 7 bank holding companies	Fed's discount rate	No/No	120 or 270 days	Sept. 19, 2008-Feb. 1, 2010
Commercial Paper Funding Facility (CPFF)	$348.2 billion on Jan. 21, 2009	$6.1 billion	120	Markups of 100 to 300 basis points over overnight index swap rate; fees of 10 to 100 basis points	No/No	90 days	Oct. 7, 2008-Feb. 1, 2010
Term Asset-Backed Securities Loan Facility (TALF)	$48.2 billion on Mar. 17, 2010	$1.6 billion to Fed; $0.7 billion to Treasury	177	Various markups over LIBOR or federal funds rate; 10 to 20 basis point administrative fee	No/Yes	5 years for CMBS, 3 years for other	Nov. 25, 2008-Mar. 31, 2010 (June 30, 2010, for new CMBS)

Sources: Federal Reserve, Office of the Inspector General, *The Federal Reserve's Section 13(3) Lending Facilities to Support Overall Market Liquidity*, November 2010; Federal Reserve, *Quarterly Report on Federal Reserve Balance Sheet Developments*, various dates. U.S. Government Accountability Office, *Federal Reserve System: Opportunities Exist to Strengthen Policies and Processes for Managing Emergency Assistance*, GAO-11-696, July 21, 2011.

Notes: Expiration date for facilities marks date after which no new activities were authorized. For some facilities, existing loans remained outstanding after the expiration date. Some facilities did not begin operations on the date announced. Recourse only includes to participant's assets; Fed had recourse for AMLF and TALF only in the case of material misrepresentation.

All the facilities except for TALF were used to provide short-term liquidity, conceptually comparable to the role of the discount window. The Fed made short-term loans through the PDCF and TSLF to primary dealers to ensure that other primary dealers did not experience liquidity crises in the wake of the primary dealer Bear Stearns's financial difficulties. Commercial paper is short-term debt issued by financial firms (including banks), nonfinancial firms, and pass-through entities that issue ABS. The Fed set up its commercial paper facilities after a run on money market mutual funds, who were large purchasers of commercial paper.

Through TALF, the Fed made three- and five-year loans to investors to encourage them to purchase ABS other than residential mortgage-backed securities (MBS).[12] ABS are an alternative way that banks and nonbanks finance loans to consumers and businesses, and they are often referred to as a form of *shadow banking*—activities that substitute for traditional bank lending and deposit-taking.[13] The decline in the value and liquidity of ABS during the crisis resulted in a sharp contraction in their issuance, reducing the credit available to households and businesses.

Figure 1 plots loans outstanding for these five facilities from March 2008, when the first facility was created, to October 2014, when the last loan was repaid. Usage of the facilities spiked beginning in mid-September 2008, peaked in December 2008, and then tapered off relatively quickly in 2009 as financial conditions stabilized. From 2010 to 2014, there were only residual amounts of credit outstanding through TALF. According to GAO, use of the facilities was relatively concentrated among a small number of borrowers—which may reflect concentration in those markets.[14]

---

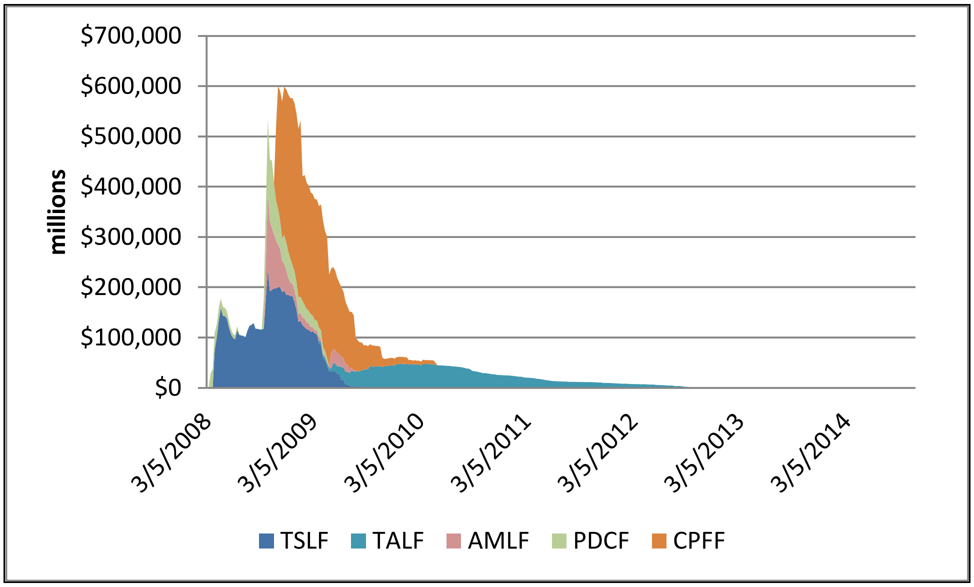
[12] Other Federal Reserve and federal emergency programs beyond the scope of this report were aimed at supporting mortgage-backed securities (MBS).

[13] For more information, see CRS Report R43345, *Shadow Banking: Background and Policy Issues*, by Edward V. Murphy.

[14] U.S. Government Accountability Office, *Federal Reserve System: Opportunities Exist to Strengthen Policies and Processes for Managing Emergency Assistance*, GAO-11-696, July 21, 2011, Tables 12, 20, 25, 27, 31, http://www.gao.gov/new.items/d11696.pdf.

Figure 1. Loans Outstanding Under Broadly Based Facilities

(March 2008-October 2014)



Source: Federal Reserve, H.4.1 release, various dates.

Notes: For TSLF, lending took the form of Treasury securities. For CPFF, commercial paper was purchased. For other facilities, lending took the form of cash. See **Appendix** for details.

Special Assistance to Firms Deemed "Too Big to Fail"

Section 13(3) was also invoked to provide exclusive, tailored assistance to prevent the disorderly failure of four large financial firms on an ad hoc basis:

- In March 2008, the Fed assisted JP Morgan Chase's takeover of Bear Stearns to prevent the latter's failure. Assistance was provided through first, a short-term bridge loan and then, the purchase of Bear Stearns troubled assets, financed through a $29 billion Fed loan;
- In September 2008, the Fed prevented AIG's failure by initially providing it a line of credit of $85 billion. The assistance was restructured several times, with the loan eventually replaced by a Fed pledge to purchase up to $52.5 billion in troubled assets in November (and the rest of the assistance shifted to Treasury);
- In November 2008, the Fed, Treasury, and the Federal Deposit Insurance Cooperation (FDIC) announced a joint agreement to guarantee a more than $300 billion portfolio of Citigroup's troubled assets;
- In January 2009, the Fed, Treasury, and FDIC announced a joint agreement to guarantee a $118 billion portfolio of Bank of America's troubled assets to assist its takeover of Merrill Lynch. The agreement was never finalized.

These actions were motivated by concerns that the failure of any of these firms would increase financial instability—in other words, the Fed viewed the firms as too big to fail or too interconnected to fail.[15] In all four cases, the Fed did not limit its action to those of a traditional

[15] For more information, see CRS Report R42150, *Systemically Important or "Too Big to Fail" Financial Institutions*, by Marc Labonte.

lender of last resort because problems at the firms were not limited to a need for short-term liquidity. In the Fed's view, the firms were not insolvent, but were vulnerable to losing access to funding markets which could cause their failure.[16] An evaluation of whether these four institutions were solvent at the time was hampered by the "fog of war"—the Fed was forced to judge their solvency hastily in the context of a crisis, in which the value of all assets was rapidly declining and it was uncertain whether the decline was temporary or permanent. While some have described this assistance as a bail out of failing firms, in all four cases, there was not clear evidence that the firms were insolvent in the classic sense.[17] In the case of Bear Stearns, JP Morgan Chase was willing to pay more to acquire it than the value of the Fed's assistance, but later reported losses related to the transaction.[18] The other three firms all eventually returned to profitability once the crisis had ended, which means they may or may not have been solvent at the time of the intervention.

As notable as who the Fed assisted is whom it chose not to assist—Lehman Brothers. Although Lehman Brothers was an investment firm similar to Bear Stearns, the Fed chose not to help facilitate its takeover by Barclays. Instead, Lehman Brothers filed for bankruptcy. Then-Chairman Bernanke later testified that the Fed declined to assist Lehman Brothers because it held inadequate collateral[19]—although some of the Fed's other interventions under Section 13(3) featured concerns about inadequate collateral. While one cannot say what would have happened in the counterexample where the Fed had assisted Lehman Brothers, Lehman Brothers' failure marked the worsening of the financial crisis.

Troubled assets were purchased from Bear Stearns and AIG through three limited liability corporations (LLCs) created and controlled by the Fed named Maiden Lane. **Figure 2** shows loans outstanding to the Maiden Lanes and directly to AIG. The direct loan to AIG was paid off in 2011. The asset holdings and loans of the Maiden Lanes tapered off slowly until 2011, when the pace accelerated. The final Maiden Lane loan was fully repaid in 2012. Although Citigroup and Bank of America were banks, this assistance was nevertheless authorized under Section 13(3) because it took the form of asset guarantees. The guarantees to Citigroup and Bank of America are not shown in **Figure 2** because Fed funds were never extended under those guarantees.

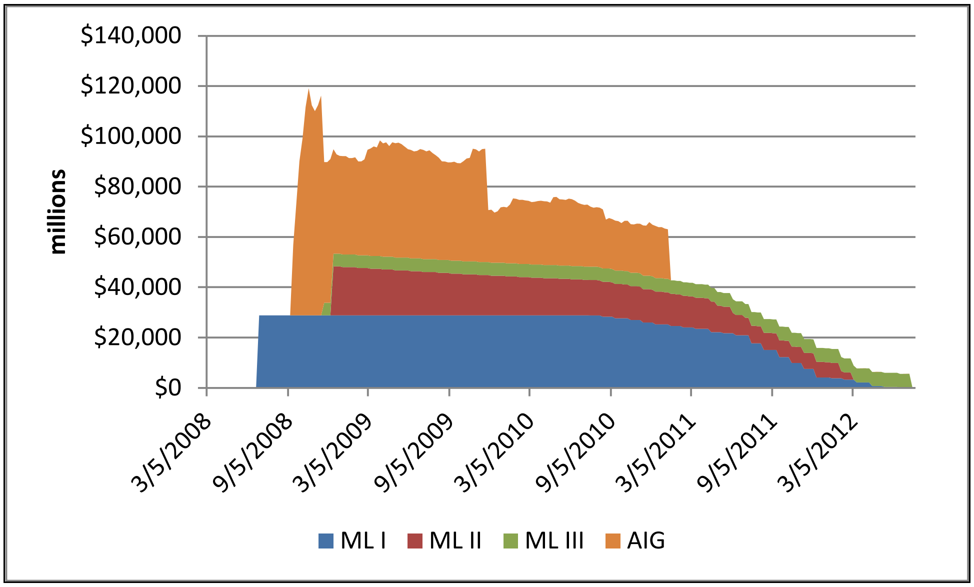
[16] As described in the reports pursuant to Section 129, available at http://www.federalreserve.gov/monetarypolicy/bst_reports.htm. In the case of Bank of America, losses were greatest at Merrill Lynch, which Bank of America was in the process of acquiring. The Fed (and Treasury) may have been most concerned that if Bank of America was not offered special assistance, the merger would fall through and Merrill Lynch would experience a disorderly failure.

[17] The solvency of Bear Stearns and AIG is analyzed in William Cline and Joseph Gagnon, *Lehman Died, Bagehot Lives: Why Did the Fed and Treasury Let a Major Wall Street Bank Fail?*, Peterson Institute for International Economics, Policy Brief no. PB 13-21, http://www.piie.com/publications/pb/pb13-21.pdf.

[18] "JPMorgan Took a Bath on Bear Stearns Sale: Dimon," *Reuters*, Oct 10, 2012, http://www.cnbc.com/id/49361397/.

[19] Chairman Ben S. Bernanke, Remarks before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate Sept. 23, 2008, available at http://www.federalreserve.gov/newsevents/testimony/bernanke20080923a1.htm.

Figure 2. Loans Outstanding for Special Assistance



Source: Federal Reserve, H.4.1 release, various dates.

Notes: ML I = Maiden Lane I, facility to assist the takeover of Bear Stearns; ML II = Maiden Lane II, facility to assist AIG; ML III = Maiden Lane III, facility to assist AIG; AIG = direct loan from Fed to AIG. Funds were never extended under asset guarantee to Citigroup and Bank of America.

Limits on Emergency Lending

Under normal authority, the Fed faces statutory limitations on whom it may lend to, what it may accept as collateral, and for how long it may lend.[20] If the Fed wishes to extend credit that does not meet these criteria, it can turn to Section 13(3).

Restrictions on Emergency Lending in Place in 2008

Section 13(3) was not in the original Federal Reserve Act of 1913; it was added in 1932 (47 Stat 715). Until the Dodd-Frank Act of 2010, the authority was very broad, with few limitations. It required that[21]

- at least five of the seven Fed governors find that there are "unusual and exigent circumstances"[22]—while this phrase has no specific legal definition, it implies that financial conditions are not normal;[23]

[20] For more information on the discount window, see https://www.frbdiscountwindow.org/en/Pages/General-Information/The-Discount-Window.aspx.

[21] The interpretation of the statute that follows each bullet is based on Alexander Mehra, "Legal Authority in Unusual and Exigent Circumstances: The Federal Reserve and the Financial Crisis," *University Of Pennsylvania Journal of Business Law*, vol. 13, no. 1, pp. 221-227.

[22] Unusual and exigent circumstances is not defined, but is considered a high threshold. See Alexander Mehra, "Legal Authority in Unusual and Exigent Circumstances: The Federal Reserve and the Financial Crisis," *University Of Pennsylvania Journal of Business Law*, vol. 13, no. 1, pp. 221-227, citing Thomas C. Baxter, Jr., Gen Counsel, Fed. Res. Bank of N.Y., "The Legal Position of the Central Bank, The Case of the Federal Reserve Bank of New York," Jan. 19, 2009, available at https://www.google.com/search?q=thomas+c.+Baxter%2C+Jr.%2C+The+Legal+Position+of+the+Central+bank&ie=utf-8&oe=utf-8.

- the Fed may "discount (for) any individual, partnership, or corporation"—that is, assistance should take the form of a loan, and the loan may be made to private individuals or businesses;
- the borrower must present "notes, drafts, and bills of exchange endorsed or otherwise secured to the satisfaction of the Federal Reserve Bank"—that is, the loan must be backed by collateral approved by the Fed;[24]
- the Fed shall charge an interest rate consistent with the same limitations applied to the discount window;[25] and
- "the Federal Reserve Bank shall obtain evidence that such individual, partnership, or corporation is unable to secure adequate credit accommodations from other banking institutions"—that is, there must be evidence that the borrower does not have private alternatives.

These restrictions did not prevent the Fed from taking several unorthodox actions in 2008. Notably, in some cases, "In form, these transactions were structured as loans. But in substance, they permitted the Fed to move assets off the balance sheets of these institutions and onto its own."[26] In the cases of AIG and Bear Stearns, the Fed purchased their assets through limited liability corporations that it created and controlled (called Maiden Lane I, II, and III). This structure allowed the Fed to comply with Section 13(3) because the asset purchases were financed through loans from the Fed to the Maiden Lanes. The loans were backed by those assets and were eventually repaid when the assets were sold off or matured.[27] In the cases of Citigroup and Bank of America, the firms were offered a guarantee in the event that they suffered losses on a portfolio of assets, structured as a loan "provided ... on a nonrecourse basis, except with respect to interest payments and fees."[28] The Fed also made a loan directly to AIG backed by the company's general assets, meaning there were no specific securities pledged in the event of nonpayment.[29] Furthermore, the Fed has interpreted "unusual and exigent circumstances" to mean that assistance

(...continued)

[23] If five governors are not available, the decision can be made unanimously by the governors available (12 U.S.C. 248r). On at least one occasion in 2008, because of vacancies on the Federal Reserve Board action under Section 13(3) was approved with only four governors voting. See Federal Reserve, *Report Pursuant to Section 129: Bridge Loan to The Bear Stearns Companies*, http://www.federalreserve.gov/monetarypolicy/files/129bearstearnsbridgeloan.pdf; Federal Open Market Committee, *Conference Call of the Federal Open Market Committee on March 10, 2008,* http://www.federalreserve.gov/monetarypolicy/files/FOMC20080310confcall.pdf.

[24] According to a working paper by legal counsel at the Fed, this requirement placed "virtually no restrictions on the form a written credit instrument must take in order to be eligible for discount." David H. Small and James A. Clouse, "The Scope of Monetary Policy Actions Authorized under the Federal Reserve Act," Federal Reserve, working paper, July 19, 2004, p. 15.

[25] The discount window standards referenced here state that rates shall be "fixed with a view of accommodating commerce and business" (12 U.S.C. 357).

[26] Alexander Mehra, "Legal Authority in Unusual and Exigent Circumstances: The Federal Reserve and the Financial Crisis," *University Of Pennsylvania Journal of Business Law*, vol. 13, no. 1, p. 235. This article also presents arguments that the Fed nevertheless exceeded its legal authority for some transactions under Section 13(3).

[27] The Commercial Paper Funding Facility (CPFF) was also structured as a limited liability corporation (LLC) that purchased commercial paper and was financed by loans from the Fed. The Fed also created LLCs associated with the Term Asset-Backed Securities Loan Facility (TALF).

[28] Board of Governors of the Federal Reserve System, *Report Pursuant to Section 129: Authorization to Provide Residual Financing to Bank of America Corporation*, January 15, 2009, http://www.federalreserve.gov/monetarypolicy/files/129bofa.pdf.

[29] Federal Reserve, *Report Pursuant to Section 129: Secured Credit Facility Authorized for American International Group*, September 16, 2008, http://www.federalreserve.gov/monetarypolicy/files/129aigseccreditfacility.pdf.

should be temporary, but routinely extended each facility's expiration date until demand for credit had waned.

One statutory revision to Section 13(3) affected the Fed's actions in 2008. In 1991, the Federal Deposit Insurance Corporation Improvement Act (P.L. 102-242; 12 U.S.C. 1811) contained a provision that removed the requirement that collateral be "of the kind and maturities made eligible for discount for member banks" at the discount window. According to the sponsor, Senator Christopher Dodd, the rationale for the provision was to enable the Fed "to make fully secured loans to securities firms in instances similar to the 1987 stock market crash."[30] Securities firms, it was argued, would not necessarily hold the same sort of assets that banks used as collateral at the discount window. By removing this language, the Fed had discretion to lend against a broader array of assets.

Changes in the Dodd Frank Act

Concerns in Congress about some of the Fed's actions under Section 13(3) during the financial crisis led to the section's amendment in Section 1101 of the Dodd-Frank Act. Generally, the intention of the provision in the Dodd-Frank Act was to prevent the Fed from bailing out failing firms while preserving enough of its discretion that it could create broadly based facilities to address unpredictable market-access problems during a crisis.[31] Specifically, the Dodd-Frank Act

- replaced "individual, partnership, or corporation" with "participant in any program or facility with broad-based eligibility";
- required that assistance be "for the purpose of providing liquidity to the financial system, and not to aid a failing financial company." It ruled out lending to an insolvent firm, defined as in any bankruptcy, resolution, or insolvency proceeding;
- required that loans be secured "sufficient(ly) to protect taxpayers from losses," and that collateral be assigned a "lendable value" that is "consistent with sound risk management practices";
- forbade "a program or facility that is structured to remove assets from the balance sheet of a single and specific company"; and
- required the "prior approval of the Secretary of the Treasury."

Proponents of the Dodd-Frank Act believed that the Fed's authority to provide assistance to too big to fail firms was no longer necessary because of other changes in the act. The Fed justified its special assistance to too big to fail firms during the crisis on the grounds that these firms could not be wound down without causing financial instability under existing law because of perceived shortcomings of the bankruptcy process. Fed officials called for the creation of a resolution regime for non-banks modeled on the FDIC's bank resolution regime so that such assistance would not be necessary in the future.[32] Title II of the Dodd-Frank Act created such a regime,

[30] Senator Christopher Dodd, *Congressional Record*, November 27, 1991, p. 36131. See also Walker Todd, "FDICIA's Emergency Liquidity Provisions," Federal Reserve Bank of Cleveland, *Economic Review*, Third Quarter, 1993.

[31] See, for example, the *Joint Explanatory Statement of the Committee of the Conference to* P.L. 111-203, H.Rept. 111-517, 111th Congress, June 29, 2010.

[32] See, for example, Chairman Ben S. Bernanke, "Federal Reserve Programs To Strengthen Credit Markets And The Economy," Testimony Before the Committee on Financial Services, U.S. House of Representatives, February 10, 2009, http://www.federalreserve.gov/newsevents/testimony/bernanke20090210a.htm.

called the "Orderly Liquidation Authority."[33] While critics oppose Title II for reasons beyond the scope of this report, proponents of the Dodd-Frank Act argue that eliminating the Fed's ability to prevent firms from failing under Section 13(3) will not result in financial instability now that firms can undergo an orderly resolution under Title II. According to Ben Bernanke, chairman of the Fed during the financial crisis, "With the creation of the [orderly] liquidation authority, the ability of the Fed to make loans to individual troubled firms like Bear [Stearns] and AIG was no longer needed and, appropriately, was eliminated."[34]

As Section 13(3) was only for "unusual and exigent circumstances" and had not been used for decades, the Fed had not promulgated a rule governing its use as of 2008, even though it had the discretion to do so. The Dodd-Frank Act also required the Fed to promulgate a rule implementing Section 1101 "as soon as is practicable," and the Fed issued a proposed rule in 2013.[35] Some public comments criticized the rule for not adding meaningful quantitative or qualitative definitions to the terms "unusual and exigent circumstances," collateral, penalty rate, insolvency, broadly based, or the duration of assistance.[36] Generally, critics believe that the vagueness of the rule is undesirable for the same reason that proponents view it as desirable—because it maximize the Fed's future discretion.[37] To date, the proposed rule has not been finalized.

Oversight Requirements

Following the use of Section 13(3) in 2008, three laws have been enacted affecting congressional oversight of emergency lending.

First, in 2008, Section 129 of the Emergency Economic Stabilization Act (P.L. 110-343) required the Fed to report to the congressional committees of jurisdiction on the terms of and justification for assistance within seven days of providing assistance under Section 13(3), with updates every 60 days.[38]

Second, in 2009, an amendment to the Helping Families Save Their Homes Act (Section 801 of P.L. 111-22) included a provision that allows Government Accountability Office (GAO) audits of "any action taken by the Board under ... Section 13(3) of the Federal Reserve Act with respect to a single and specific partnership or corporation." This provision allowed GAO audits of the Maiden Lane facilities and the asset guarantees of Citigroup and Bank of America, but it maintained audit restrictions on non-emergency activities and the broadly based emergency lending facilities.

Third, Section 1101 of the Dodd-Frank Act required that details on the assistance provided under Section 13(3) be reported to the committees of jurisdiction within seven days, with regular updates. Section 1103 required lending records (including details on the identity of the borrower

[33] For more information, see the FDIC website https://www.fdic.gov/resauthority/.

[34] Ben Bernanke, "Warren-Vitter and the Lender of Last Resort," Brookings Institution, blog, May 15, 2015, http://www.brookings.edu/blogs/ben-bernanke/posts/2015/05/15-warren-vitter-proposal.

[35] Federal Reserve, "Federal Reserve Board Seeks Comment on Proposed Amendments to Regulation A Regarding Emergency Lending Authority," press release, December 23, 2013, http://www.federalreserve.gov/newsevents/press/bcreg/20131223a.htm. For more information, see CRS Legal Sidebar WSLG1247, *Fed's Emergency Lending Rule Not Finalized A Year After Public Comment Period*, by M. Maureen Murphy.

[36] Comment letters are posted on the Fed's website at http://www.federalreserve.gov/apps/foia/ViewComments.aspx?doc_id=R-1476&doc_ver=1.

[37] This debate is discussed below in the section entitled "How Much Discretion Should the Fed Be Granted?"

[38] These reports are available at http://www.federalreserve.gov/monetarypolicy/bst_reports.htm.

and the terms of the loan) from the crisis to be publicly released on December 1, 2010,[39] and lending records from future programs created under Section 13(3) to be publicly released a year after the facility was terminated or two years after lending ceased, whichever came first. Section 1102 allowed GAO to audit any action under Section 13(3) for operational integrity, accounting, financial reporting, internal controls, effectiveness of collateral policies, favoritism, and use of third-party contractors—but did not allow GAO to conduct an economic evaluation—and Section 1109 required GAO to conduct an audit of all Fed emergency facilities created between December 2007 and enactment. GAO may not disclose confidential information until the lending records are released.[40]

For more details, see CRS Report R42079, *Federal Reserve: Oversight and Disclosure Issues*, by Marc Labonte.

Policy Issues

Why Was the Fed Established as a "Lender of Last Resort"?

Economists distinguish between liquidity problems and solvency problems facing financial firms. Firms become insolvent when their assets are worth less than their liabilities (e.g., because their assets have fallen in value). Liquidity (i.e., cash flow) problems arise because of the maturity mismatch between a financial firm's long-term assets and short-term liabilities. In any instance where such a mismatch exists, no matter how much liquidity the firm holds, a firm is vulnerable to a loss of liquidity if it cannot roll over its short-term liabilities—even if the firm is solvent. In a crisis, creditors are unable to distinguish between solvent and insolvent firms, so both lose access to liquidity. The classic example of a liquidity crisis is a bank run, in which depositors withdraw their deposits (liabilities) and banks cannot liquidate loans (assets) to meet withdrawals. Holding more cash and fewer loans would make a run less likely but could not completely prevent it, and the unintended consequence would be that loans would be more expensive to customers. The Fed was created as a lender of last resort with this scenario in mind—when its depositors withdrew funds, a bank would be able to pledge its assets at the Fed's discount window in exchange for short-term loans. Because the Fed controls the money supply, it is in a unique position to potentially provide unlimited liquidity. This position enhances its ability to credibly pledge to end financial crises.

One alternative to the Fed acting as a lender of last resort in a crisis is to allow the panic to run its course. Eventually the panic would subside, but crises can lead to significant contractions in real economic activity and declines in prices. This was the approach followed in the nineteenth and early twentieth centuries, until repeated panics resulted in the creation of the Fed. But while the Fed's emergency actions may have hastened the end of the recent crisis, the Fed alone could not prevent the crisis nor restore financial stability. Ultimately, the mainstream view is that financial conditions did not stabilize until the banking system was recapitalized through the Troubled Asset Relief Program (TARP)[41]; the Fed does not have authority to recapitalize financial institutions.

---

[39] The records can be accessed at http://www.federalreserve.gov/newsevents/reform_transaction.htm.

[40] The audit is available at U.S. Government Accountability Office, *Federal Reserve System: Opportunities Exist to Strengthen Policies and Processes for Managing Emergency Assistance*, GAO-11-696, July 21, 2011, http://www.gao.gov/new.items/d11696.pdf.

[41] For more information, see CRS Report R41427, *Troubled Asset Relief Program (TARP): Implementation and Status*, by Baird Webel.

Who Should Have Access to the Lender of Last Resort?

Lending to Nonbank Financial Firms?

Do nonbank financial firms also face liquidity problems, and does this justify the Fed's emergency authority? Although only banks accept deposits, many types of financial firms face a maturity mismatch between long-term assets and short-term liabilities. As a result, many types of financial firms are vulnerable to liquidity crises. In 2008, the availability of repurchase agreements (repos) and commercial paper—two prominent types of short-term lending for nonbanks—sharply and suddenly contracted, causing liquidity problems for banks and nonfinancial firms. Thus, some nonbank financial firms could also benefit from access to Fed lending in a liquidity crisis.

While some nonbank firms could benefit from access to a lender of last resort, policymakers might decide to grant them access only if there is some wider societal benefit to doing so. Such benefits could be because a failure to do so would result in financial instability, through spillover effects (e.g., counterparty exposure), contagion, or the disruption of critical functions within the financial system. Banks provide critical functions through their unique role in the payment system, for example. Nonbanks do not play a similar role in the payment system, although they are important participants in similar markets, such as the repo market, that might also be viewed as critical.[42]

Before 2008, there was some debate about whether nonbank financial firms were systemically important enough that there would be widespread repercussions if they faced a crisis. Likewise, there was some debate about whether a nonbank crisis would significantly affect the availability of credit to consumers and businesses. Crises cause economic contractions because financial firms extend less credit to consumers and businesses to hoard liquidity. Over time, the nonbank financial sector has grown in absolute terms and relative to banks. The 2008 experience suggests that a nonbank crisis can be damaging to the availability of credit and the broader financial sector. Thus, the rationale of having a lender of last resort to provide liquidity also extends to parts of the nonbank financial system, although the tradeoffs may be different. This raises the question of whether there should be disparate treatment of banks and nonbanks—banks receive continual access to the discount window, whereas any given nonbank receives no access to the Fed in normal conditions and uncertain access to the Fed in unusual and exigent circumstances. Should nonbanks be allowed to be members of the Federal Reserve system to ensure access to the discount window? If so, should they be subject to prudential supervision by the Fed?[43]

Not all uses of Section 13(3) during the crisis were for the purpose of providing short-term liquidity, however. TALF loans had terms of three to five years and were intended to revive long-

---

[42] For more information on critical functions, see Financial Stability Oversight Council, "Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies," 77 *Federal Register* 21657, April 11, 2012, http://www.treasury.gov/initiatives/fsoc/rulemaking/Documents/Authority%20to%20Require%20Supervision%20and%20Regulation%20of%20Certain%20Nonbank%20Financial%20Companies.pdf.

[43] Another question raised by the crisis is whether foreign firms should have access to the Fed's broadly based emergency facilities. For each facility, foreign firms were not eligible to participate, but U.S. affiliates of foreign firms or foreign affiliates of U.S. firms were, depending on the facility. Firms with foreign parent companies were large users of some facilities. For example, 59% of credit extended under the CPFF went to U.S. subsidiaries of foreign firms. Source: U.S. Government Accountability Office, *Federal Reserve System: Opportunities Exist to Strengthen Policies and Processes for Managing Emergency Assistance*, GAO-11-696, July 21, 2011, http://www.gao.gov/new.items/d11696.pdf, Figure 10.

term consumer and business credit (by increasing the demand for ABS, which might be described as increasing their liquidity). The AIG loan initially had a maturity of two years. The Maiden Lane facilities set up for Bear Stearns and AIG and the asset guarantees for Citigroup and Bank of America were all intended to help those firms with troubled assets. The Dodd-Frank Act now requires that assistance provided under Section 13(3) be "for the purpose of providing liquidity to the financial system, and not to aid a failing financial company."

Lending to Nonfinancial Firms?

Another issue is whether Section 13(3) should ever be used to provide credit to nonfinancial firms. In 2008, the Fed chose to use Section 13(3) to provide credit mainly to financial firms, although nonfinancial firms were eligible to sell their commercial paper to the CPFF. The Dodd-Frank Act limits actions under Section 13(3) to providing liquidity to the financial system, but does not limit participants to financial firms. In the 1930s, emergency loans were made to nonfinancial firms. Although nonfinancial firms might also have liquidity needs,[44] they do not generally face the maturity mismatch that makes liquidity risk inherent to financial firms. Loans to nonfinancial firms are more likely to involve the provision of long-term credit. Liquidity problems at nonfinancial firms may also pose less systemic risk than at financial firms because they are less interconnected with the financial system and do not perform critical functions in the financial system.

The advantage of providing long-term credit to nonfinancial firms is that it directly stimulates physical capital investment spending on plant and equipment, which in turn directly stimulates gross domestic product (GDP). The disadvantage is that it is more likely to put the Fed in the position of "picking winners", and the Fed has no expertise in evaluating the creditworthiness of loan proposals. In two cases, the Fed made loans to intermediaries to avoid that problem. In other words, the direct recipients of the loans were not the intended recipients of ultimate assistance. AMLF made loans to banks to finance the purchase of commercial paper to relieve stress in the commercial-paper market. TALF made loans to investment funds to purchase ABS to revive the private-securitization market. The tradeoff in these two cases is that, to entice banks and investors, respectively, to participate in these programs, the Fed made the terms of the programs relatively attractive to them (the loans were non-recourse, for example), potentially reducing the profits and increasing the risk exposure for the Fed.

Lending to Government or Government Chartered Entities?

Another category of firms that Congress might consider whether it wants to make ineligible for assistance under Section 13(3) is entities associated with the government, such as government agencies, government-sponsored enterprises (GSEs), or bridge banks created in an FDIC resolution.[45] Some Members of Congress have also expressed concern that Section 13(3) could be used to assist state or municipal governments. The Fed has never used Section 13(3) for these purposes. Current statute does not explicitly rule it out, although such an action might have trouble meeting the statute's various requirements, such as that the facility be broadly based for the purpose of providing liquidity to the financial system.

[44] The Fed bought some commercial paper issued by nonfinancial firms through the CPFF. Because commercial paper has short maturities, this action can be characterized as providing liquidity rather than long-term credit.

[45] Direct lending to the federal government is prohibited by Section 14 of the Federal Reserve Act.

Lending to Itself?

During the crisis, the Fed structured many of its transactions under Section 13(3) as loans to a LLC that it created and controlled. It did so to comply with the Section 13(3) requirement that assistance take the form of a loan. For example, in 2008, the Fed created the Commercial Paper Funding Facility (CPFF) to purchase commercial paper, a debt security that is economically equivalent to a short-term loan from the borrower's perspective. In this case, the Fed was able to purchase commercial paper by setting up a limited liability corporation (LLC) that it controlled and lending the LLC funds to finance the purchases. Some of the commercial paper the CPFF purchased was not collateralized, however, so it was not economically equivalent to a collateralized loan.

These actions raise two policy issues. First, should Section 13(3) be restricted so that the Fed cannot lend to LLCs it creates and controls? Second, should Section 13(3) be modified so that the Fed can provide short-term liquidity by purchasing debt securities? [46]

From an economic perspective, whether a company accesses short-term liquidity by taking out a loan or issuing a debt security does not change its purpose. On practical grounds, since financial firms increasingly rely on debt securities for liquidity needs, allowing the Fed to purchase them would make it a more effective lender of last resort. But allowing the Fed to purchase securities (directly or through LLCs it controls) to provide short-term liquidity faces the "slippery slope" problem. The Fed also used LLCs in the Maiden Lanes case, where the goal was not to provide short-term liquidity but to remove troubled assets from a firm's balance sheet. The Dodd-Frank Act maintained the Fed's ability to create LLCs, but prohibits "a program or facility that is structured to remove assets from the balance sheet of a single and specific company." It might be difficult to draw a bright line between debt securities purchased for liquidity purposes and other types of securities.

What Are the Potential Costs of the Fed Making Loans to Nonbanks?

Potential costs inherent in Section 13(3) lending can be divided into risks to taxpayers and broader economic consequences. These costs can be weighed against the benefits of Section 13(3) lending, which could be significant if the lending restores or maintains financial stability. While lending poses risks to the taxpayer, if the Fed did not act, the economic losses from allowing a financial crisis to run its course would also pose risks to taxpayers in terms of a larger federal budget deficit and privately through higher unemployment, lost wealth, and so forth.

The risk to the taxpayer of lending is primarily default risk. The Fed can—but is not required to—attach various conditions to its lending to minimize default, including requiring short maturities, collateral in excess of the funds lent (i.e., applying a "haircut" to collateral), senior creditor standing, and recourse if collateral proves insufficient. Note that the Fed has typically—but not always—imposed all of these conditions to Section 13(3) assistance. Loans to nonbanks are arguably not inherently riskier than loans to banks; to the extent that Section 13(3) programs were riskier than the discount window, it was mainly because these conditions were loosened. Lending

[46] The Fed is allowed to purchase a narrow range of securities under Section 14 of the Federal Reserve Act. Few securities issued by private firms are permitted besides bank acceptances and bills of exchange, subject to limitations. The Fed has purchased neither in modern times. For more information, see David H. Small and James A. Clouse, "The Scope of Monetary Policy Actions Authorized under the Federal Reserve Act," Federal Reserve, working paper, July 19, 2004, Section 3.4.

to non-banks may also be riskier because the Fed can safeguard its lending to banks through prudential supervision, but, with the exception of firms designated as "systemically important financial institutions" (SIFIs) or structured as bank holding companies, the Fed has no jurisdiction to supervise nonbanks for safety and soundness. In times of crisis, the Fed's broader ability to restore financial stability also reduces default risk for any specific loan.

In some cases, the Fed was able to protect the taxpayer through terms other than conventional collateral pledges. For example, the Fed required that AIG provide it with compensation in the form of an equity stake in the company in exchange for a loan. The Fed's ability to protect taxpayers against losses could be more limited in the future based on a recent court ruling. The court found that the AIG equity stake was an illegal exaction.[47] However, because the Dodd-Frank Act prohibits assistance to single or failing firms, future scenarios in which the Fed would need to take an equity stake to adequately protect taxpayers may be limited.

One broader economic concern with Section 13(3) lending raised by Chairman Jeb Hensarling is that "its use risks exacerbating moral hazard costs."[48] Moral hazard is the concept that firms will take greater risks if they are protected from negative outcomes. In this case, moral hazard occurs because firms are more likely to be more reliant on short-term lending if they anticipate access to Fed lending during a liquidity crisis. Some argue that Section 13(3) should be repealed or curbed because of moral hazard, but Bernanke compares that approach to shutting down the fire department to encourage fire safety, instead of toughening the fire code. Unlike lending to banks, the Fed cannot mitigate moral hazard through prudential supervision, however, excepted in the cases noted above.

Moral hazard concerns can be overstated. For instance, moral hazard arguably did not cause nonbank financial firms to be reckless about liquidity management before the crisis, unless they were able to anticipate that Section 13(3) would be used to provide them with liquidity, even though it had never been used for that purpose before 2008. Thus, greater market discipline might reduce moral hazard problems but cannot eliminate liquidity crises.

Another economic concern with Section 13(3) lending is that it could cause credit to be allocated away from its most economically efficient use. In a liquidity crisis, when the availability of private lending, by definition, is constrained, the likelihood that Fed lending comes at the expense of private lending is lower. The legacy of aid to too-big-to-fail firms in 2008 might be more likely to cause issues with credit allocation, particularly if markets expect it to be repeated in the future. As discussed above, the Dodd-Frank Act prohibits the use of Section 13(3) to aid insolvent firms, but defines insolvency relatively narrowly.

How Much Discretion Should the Fed Be Granted?

Limiting discretion is the common goal running throughout many of the diverse policy proposals to alter Section 13(3). The fact that the Fed has broad discretion under Section 13(3) allowed the Fed, for or better or worse, to act swiftly, pledge sizable interventions, create a diverse set of facilities for a diverse set of lenders, and tackle multiple, disparate problems as they emerged. It also explains why the Fed was able to provide assistance in forms not envisioned by Congress

[47] For more information, see CRS Legal Sidebar WSLG1300, *Court Finds AIG's Bail-Out Terms Constitute an Illegal Exaction but Awards No Damages*, by M. Maureen Murphy and David H. Carpenter.

[48] Chairman Jeb Hensarling, comment letter to the Federal Reserve, docket number R-1476, January 13, 2014.

that arguably were not always consistent with the spirit of a lender of last resort, such as the Maiden Lane LLCs.[49]

Fed governor Jerome Powell believes that the Congress should maintain the Fed's current discretion under Section 13(3) because

> One of the lessons of the crisis is that the financial system evolves so quickly that it is difficult to predict where threats will emerge and what actions may be needed in the future to respond. Because we cannot anticipate what may be needed in the future, the Congress should preserve the ability of the Fed to respond flexibly and nimbly to future emergencies. Further restricting or eliminating the Fed's emergency lending authority will not prevent future crises, but it will hinder the Fed's ability to limit the harm from those crises for families and businesses.[50]

In his view, the Dodd-Frank reforms "struck a reasonable balance ... (and) it would be a mistake to go further and impose additional restrictions" on Section 13(3). Alternatively, some argue that discretion can increase uncertainty, thereby increasing systemic risk. For example, some argue that the failure of Lehman Brothers exacerbated financial instability because market participants believed that it would receive Fed assistance similar to Bear Stearns and panicked when it did not.

One potential drawback to discretion is that assistance might be provided in ways the Dodd-Frank Act did not intend, such as to prevent a firm from failing. As noted above, the Dodd-Frank Act modified Section 13(3) to rule out lending to an insolvent firm, but some critics are skeptical that the Dodd-Frank Act successfully ruled out the use of Section 13(3) to aid an insolvent firm. For example, the Fed's proposed rule on Section 13(3) would allow the Fed to base a solvency finding on the borrower's certification, which can be defined as in a bankruptcy proceeding or resolution process, as set out in the Dodd-Frank Act. One critic argued that "The notion that a firm is only insolvent once it is already in a bankruptcy, resolution or receivership contradicts both common sense and historical practice. Bankruptcy does not trigger insolvency, insolvency triggers bankruptcy."[51] He also argued that since Maiden Lane I was used to facilitate the takeover of Bear Stearns (a failing firm) by JP Morgan Chase (a solvent firm), the Dodd-Frank restrictions would not have prevented it because the Fed could have characterized the recipient of the assistance to be JP Morgan Chase.[52] As long as emergency authority exists, policymakers may be tempted to use it to bail out a failing firm to avoid a crisis—and the broader the authority, the more feasible it becomes.[53]

---

[49] According to the legal counsel of the NY Fed, "The Congress that enacted Section 13(3) in the 1930's envisioned the Federal Reserve lending to companies, but it surely did not envision the Fed lending to an LLC, because that legal form of organization would not be invented for another 40 years." Thomas Baxter, "The Legal Position of the Central Bank. The Case of the Federal Reserve Bank of New York," speech delivered to *Regulatory Response to the Financial Crisis* conference, January 19, 2009.

[50] Governor Jerome H. Powell, "'Audit the Fed' and Other Proposals," speech at the Catholic University of America, Columbus School of Law, Washington, DC, February 9, 2015, http://www.federalreserve.gov/newsevents/speech/powell20150209a.htm.

[51] Mark Calabria, comment letter, docket number R-1476, March 6, 2014, posted at http://www.federalreserve.gov/SECRS/2014/March/20140313/R-1476/R-1476_030614_112088_544011429703_1.pdf.

[52] Mark Calabria, comment letter, docket number R-1476, March 6, 2014, posted at http://www.federalreserve.gov/SECRS/2014/March/20140313/R-1476/R-1476_030614_112088_544011429703_1.pdf.

[53] This report takes no position on whether the Fed should bail out failing firms. Bailing out firms poses tradeoffs between potential benefits to financial stability in the short run and potential costs, including moral hazard and risks to taxpayers.

Arguably, another drawback to discretion is the potential for favoritism. Because the types of nonbank financial firms are numerous and diverse, deciding who should get access to loans involves trade-offs and judgments that are not completely technical in nature. For example, the Fed set a high minimum loan size in TALF that effectively limited access to loans at below-market interest rates to large investors. The decision to outsource certain functions of emergency facilities to third-party vendors also creates the potential for favoritism.[54]

Congress could curb discretion by adding more restrictions to Section 13(3) or by requiring Congressional approval for each action taken under Section 13(3). The latter proposal, depending on the details, could potentially affect the timeliness and credibility of the Fed's actions during a crisis. Examples of additional restrictions Congress could add to Section 13(3) include restrictions on who is eligible for assistance and the terms of assistance, such as acceptable collateral or the rate that the Fed charges (discussed below). Congress could also add limits on the amount of total assistance or assistance to one borrower.[55] Granting the Fed discretion on these issues is in part a judgment by Congress about whether it or the Fed can balance these competing policy considerations more effectively. For example, favoritism concerns could potentially be exacerbated or mitigated if Congress were more involved.

Another consideration for the degree of discretion provided is the Fed's independence from Congress and the Administration. The Fed argues that maintaining its independence is important for the credibility and effectiveness of its monetary policy. At the same time, greater independence complicates accountability to Congress. It is fair to question how much discretion on Section 13(3) affects perceptions of monetary policy independence because 13(3) is used so rarely. The Dodd-Frank Act's requirement that assistance under Section 13(3) be preapproved by the Treasury Secretary reduces the Fed's independence from the Administration, although the Treasury Secretary supported all of the Fed's actions taken under Section 13(3) in 2008.

What Rate Should the Fed Charge?

In determining what rate the lender of last resort should charge, economists and central bankers almost universally point to the maxim of Walter Bagehot—lend freely against good collateral, but at a penalty.[56] Consensus breaks down on how penurious the penalty rate should be. A penalty rate (i.e., a rate that is higher than the market rate) achieves two goals: (1) it maximizes the return to the central bank (and thus the taxpayer) and (2) it discourages lenders from turning to the central bank instead of the private market when private credit is available (hence, the concept of lender of *last* resort), thereby reducing moral hazard problems. These two goals call for making the rate as high as possible. Alternatively, financial stability concerns call for making the rate as close to market rates as possible. Higher rates will potentially undermine financial stability by discouraging the use of Fed facilities, which may increase the stigma associated with borrowing from the Fed (i.e., if lending is made unattractive to healthy firms, the decision to borrow could be taken as a sign of desperation). Further, higher rates might weaken the health of the borrower, thereby undermining the goal of restoring stability. This concept is most starkly demonstrated in the case of assistance to AIG during the crisis (for details, see the **Appendix**). The terms of the

[54] For details on third-party vendors, see Federal Reserve, Office of the Inspector General, *The Federal Reserve's Section 13(3) Lending Facilities to Support Overall Market Liquidity*, November 2010, p. 25 http://oig.federalreserve.gov/reports/FRS_Lending_Facilities_Report_final-11-23-10_web.pdf. The New York Fed's contracts with third-party vendors are posted at http://www.newyorkfed.org/aboutthefed/vendor_information.html.

[55] In an earlier provision of the Dodd-Frank Act that was not enacted, total assistance under Section 13(3) would have been limited to $4 trillion.

[56] Walter Bagehot, *Lombard Street: A Description of the Money Market* (New York: Charles Scribner's Sons, 1873).

initial Fed loan were more favorable to the taxpayer than the subsequent iterations of assistance, which were repeatedly renegotiated for fear that overly harsh terms would compromise the company's viability.

There is also a question of how a market rate should be calculated during a crisis. Generally, two features of a crisis are that markets become illiquid (so there are fewer transactions to observe) and rates become higher. These features would argue for using a pre-crisis market rate as the baseline. Critics incorrectly accused the Fed of charging below-market rates during the crisis.[57] The seeming contradiction between the low rates charged by the Fed in absolute terms and the fact that these rates were a markup above market rates is explained by the fact that the market rates referenced by the Fed were directly influenced by monetary policy. At the same time, the Fed was making these loans, it was in the process of reducing the federal funds rate to zero.

Should Borrowers' Identities Be Kept Confidential?

The Fed has argued that allowing the public to know which firms are accessing its facilities could undermine investor confidence in the institutions receiving aid because of a perception that recipients are weak or unsound. A loss of investor confidence could potentially lead to destabilizing runs on the institution's deposits, debt, or equity. If institutions feared that this would occur, the Fed argues, the institutions would be wary of participating in the Fed's programs. A delayed release of information mitigates, but does not eliminate, these concerns. Some critics would view less Fed lending as a positive outcome, but if the premise that the Fed's lender of last resort role helps prevent financial crises by maintaining the liquidity of the financial system is accepted, then an unwillingness by institutions to access Fed facilities makes the system less safe. One study argues that the Fed's decision to discourage banks to use the discount window from 1929-1931 (at a time when identities were kept confidential) worsened the bank panic in the Great Depression.[58]

Whether investors are less willing to borrow as a result of the disclosure of identities will not be apparent until the next crisis. A historical example supporting the Fed's argument would be the experience with the Reconstruction Finance Corporation (RFC) in the Great Depression. When the RFC publicized to which banks it had given loans, those banks typically experienced depositor runs.[59] A more recent example—disclosure of TARP fund recipients—provides mixed evidence. At first, TARP funds were widely disbursed, and recipients included all the major banks. At that point, there was no perceived stigma to TARP participation. Subsequently, many banks repaid TARP shares at the first opportunity, and several remaining participants have expressed concern that if they did not repay soon, investors would perceive them as weak.

The granularity of information to be disclosed is a policy issue. Aggregate information about programs and activities that does not require the identification of borrowers tends to be more useful for broad policy purposes, while current information on specific transactions within the programs is of interest to investors. The Fed voluntarily released the former, but only reluctantly released the latter when compelled to by legislation and lawsuits. For oversight purposes, the former would suffice for answering most questions about taxpayer risk exposure, expected profits

[57] The reliability of market benchmarks is another issue. In some cases, the rate charged by the Fed was tied to LIBOR, and several banks have settled legal cases related to the manipulation of LIBOR during the financial crisis.

[58] Gary Gorton and Andrew Metrick, "The Federal Reserve and Panic Prevention," *Journal of Economic Perspectives,* vol. 27, no. 4, Fall 2013, p. 53.

[59] James Butkiewicz, "The Reconstruction Finance Corporation, the Gold Standard, and the Banking Panic of 1933," *Southern Economic Journal,* vol. 66, no. 2, October 1999, p. 271.

or losses, potential subsidies, economic effects, and evaluating the state of the financial system. The latter would be necessary for transparency around issues such as favoritism (certain firms receiving preferential treatment over similar firms).[60] Although preventing favoritism is a valid policy goal, releasing the identities of borrowers to "name and shame" them is more questionable, especially if one believes that these programs were helpful for providing liquidity and maintaining financial stability. Naming and shaming is likely to result in less uptake of the programs in the future. If one believes that these lending programs are not helpful, repealing Section 13(3) would be more effective than undermining their effectiveness by stigmatizing recipients.

As discussed above, the Dodd-Frank Act compromised between stability and oversight concerns by requiring borrowers' identities to be publicly released with a lag. Some Members of Congress have expressed an interest in revisiting this issue.

Selected Legislation in the 114th Congress

H.R. 3189

The Fed Oversight Reform and Modernization Act (H.R. 3189) was ordered to be reported by the House Financial Services Committee on July 29, 2015. Section 11 of the bill as ordered to be reported amends Section 13(3) to limit the Fed's discretion to make emergency loans. It limits 13(3) to "unusual and exigent circumstances that pose a threat to the financial stability of the United States" and requires "the affirmative vote of not less than nine presidents of Federal reserve banks" in addition the current requirement of the affirmative vote of five Fed governors. It forbids the Fed from accepting as collateral equity securities issued by a borrower. It requires the Fed to issue a rule establishing how it will determine sufficiency of collateral; acceptable classes of collateral; any discount that will be applied to determine the sufficiency of collateral; and how it will obtain independent appraisals for valuing collateral. It eliminates the current language permitting the Fed to establish the solvency of a borrower based on the borrower's certification and specifies that before a borrower may be eligible for assistance, the Fed's Board and any other federal banking regulator with jurisdiction over the borrower must certify that the borrower is not insolvent. It limits assistance to financial institution participants and defines financial institution to require that the company be "predominantly engaged in financial activities" and to preclude federal, state, and local government agencies and government-controlled or sponsored entities. It requires the Fed to issue a rule establishing a minimum interest rate on emergency loans based on the sum of the average secondary discount rate charged by the Federal Reserve banks over the most recent 90-day period and the average of the difference between a distressed corporate bond index (as defined by a rule issued by the Fed) and the Treasury yield over the most recent 90-day period.

S. 1320

The Bailout Prevention Act (S. 1320) would amend Section 13(3) to limit the Fed's discretion to make emergency loans. It eliminates the current language permitting the Fed to establish the solvency of a borrower based on the borrower's certification and specified that a borrower may not be eligible for assistance unless the Fed and all federal banking regulators with jurisdiction

[60] Another option for addressing these types of questions would be to allow GAO, the Fed's Inspector General, or some other outside group to investigate confidential material without releasing it to the public.

over the borrower certify that the borrower is not insolvent and issue a detailed public explanation of the certification decision. The certification must be based on an assessment of "relevant financial data" for the most recent 4 months and determine that the fair value of the borrower's assets exceeds the fair value of liabilities—adjusting for temporary market illiquidity. It forbids the Fed from lending to a bridge company set up under Title II of the Dodd-Frank Act. It defines broad-based eligibility to comprise at least five companies. Its sets the minimum interest rate on a loan to be at least five percentage points above the yield on a Treasury security with a comparable duration. It provides the Fed with authority to create a program that does not meet the bill's definition of broad-based eligibility or minimum lending rate, provided it notifies Congress within three days. If a joint resolution authorizing the program to continue is not enacted within 30 days of receipt of that notice, the program terminates. Section 4 of the bill is unrelated to Fed emergency lending.

H.R. 2625

The Bailout Prevention Act (H.R. 2625) would amend Section 13(3) to limit the Fed's discretion to make emergency loans. It eliminates the current language permitting the Fed to establish the solvency of a borrower based on the borrower's certification and specified that a borrower may not be eligible for assistance unless the Fed and all federal banking regulators with jurisdiction over the borrower certify that the borrower is not insolvent and issue a detailed public explanation of the certification decision. The certification must be based on an assessment of "relevant financial data" for the most recent 4 months and determine that the fair value of the borrower's assets exceeds the fair value of liabilities—adjusting for temporary market illiquidity. It forbids the Fed from lending to a bridge company set up under Title II of the Dodd-Frank Act. It defines broad-based eligibility to comprise at least five companies. Its sets the minimum interest rate on a loan to be at least five percentage points above the yield on a Treasury security with a comparable duration. It provides the Fed with authority to create a program that does not meet the bill's definition of broad-based eligibility or minimum lending rate, provided it notifies Congress within three days. If a joint resolution authorizing the program to continue is not enacted within 30 days of receipt of that notice, the program terminates. It would reduce the delayed release of unredacted GAO reports and lending records pertaining to Section 13(3) from one or two years to 60 days.

Appendix. Details on the Actions Taken Under Section 13(3) in 2008

Term Securities Lending Facility

Shortly before Bear Stearns suffered its liquidity crisis, the Fed created the Term Securities Lending Facility (TSLF) on March 11, 2008, to expand its existing securities lending program for primary dealers.[61] Primary dealers are financial firms that are the Fed's counterparties for open market operations, including investment banks that were ineligible to access the Fed's lending facilities for banks. At the end of 2007, there were 20 primary dealers, including Bear Stearns.[62] The proximate cause of Bear Stearns' crisis was its inability to roll over its short-term debt, and the Fed created the TSLF and the Primary Dealer Credit Facility (discussed below) to offer an alternative source of short-term liquidity for primary dealers.

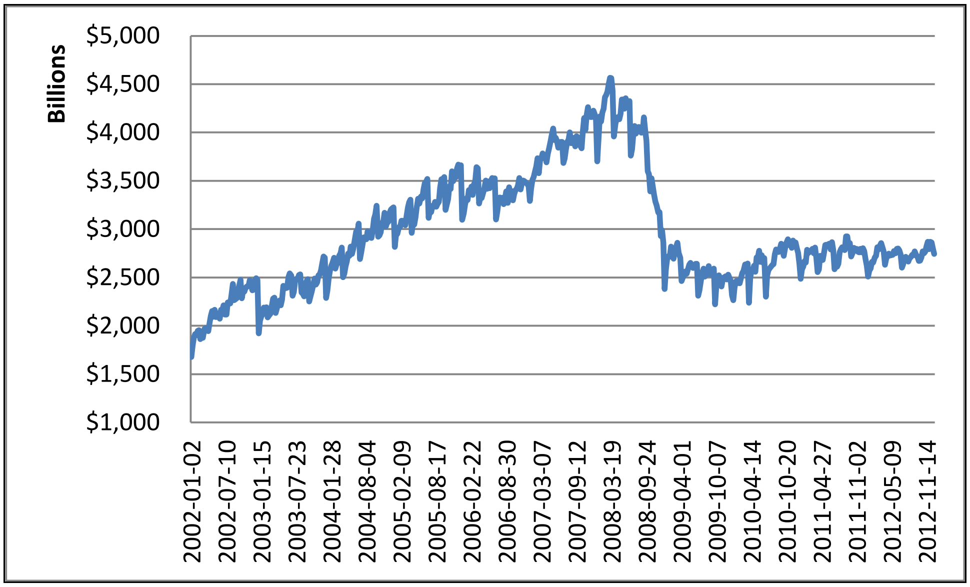
Primary dealers were already allowed to borrow securities from the Fed on an overnight basis before the crisis. The TSLF extended the length of the loans and acceptable collateral, and signaled that the Fed was willing to lend on a larger scale. Under the TSLF at its peak, each week primary dealers could borrow up to $200 billion of Treasury securities for 28 days, as opposed to overnight. Primary dealers need access to Treasury securities because of their use in repurchase agreements (repos), which are an important source of short-term financing. **Figure A-1** shows the decline in primary dealer repos outstanding in 2008. At various points, loans could be collateralized with some of the following: private-label mortgage-backed securities (MBS) with an AAA/Aaa rating, agency commercial MBS, agency collateralized mortgage obligations, and all investment-grade debt securities. On July 30, 2008, the Fed created the TSLF Options Program within the TSLF that allowed primary dealers to pre-negotiate options to borrow securities. No securities were borrowed through the TSLF after August 2009, and the facility expired February 1, 2010. The TSLF experienced no losses and earned income of $781 million over the life of the program.

[61] For more information, see New York Fed documents collection on the TSLF posted at http://www.newyorkfed.org/markets/tslf.html.

[62] The official list of current primary dealers is posted at http://www.newyorkfed.org/markets/pridealers_current.html. Lists of past primary dealers are available at http://www.newyorkfed.org/markets/Dealer_Lists_1960_to_2014.xls.

Figure A-1. Primary Dealer Repos Outstanding

(2002-2012, weekly)



Source: New York Fed, Primary Dealer Statistics.

Notes: Includes overnight, continuing, and term agreement repos.

Primary Dealer Credit Facility

Shortly after Bear Stearns' liquidity crisis, the Fed created the Primary Dealer Credit Facility (PDCF) on March 16, 2008. The PDCF can be thought of as analogous to a discount window for primary dealers.[63] Loans were made at the Fed's discount rate, which was set slightly higher than the federal funds rate during the crisis. Loans were made on an overnight basis, with recourse, and they were fully collateralized, limiting their riskiness. Acceptable collateral at times included Treasuries; government agency debt; investment grade corporate, mortgage-backed, asset-backed, and municipal securities; and certain classes of equities. The PDCF expired on February 1, 2010.

Borrowing from the facility was sporadic, with average daily borrowing outstanding above $10 billion in the first three months and falling to zero in August 2008. Much of this initial borrowing was done by Bear Stearns, before its merger with JPMorgan Chase was complete. Borrowing picked up again in September 2008 and peaked at $148 billion on October 1, 2008. No loans were outstanding after May 2009. The PDCF experienced no losses and earned interest income of $0.5 billion over the life of the program.

Commercial Paper Funding Facility and Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility

To meet liquidity needs, many large firms routinely issue commercial paper, which is short-term debt purchased directly by investors that matures in less than 270 days, with an average maturity

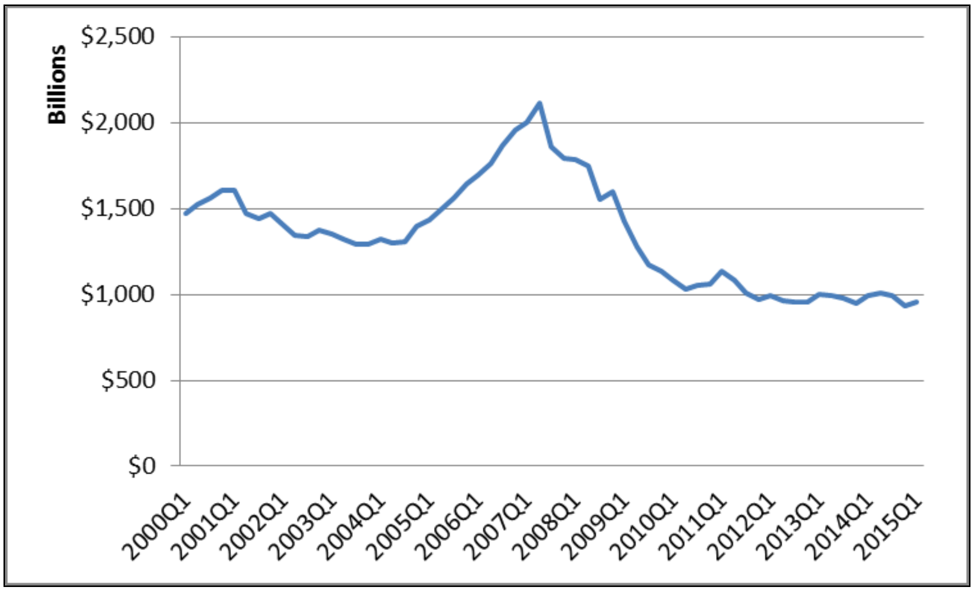
[63] For more information, see New York Fed documents collection on the PDCF posted at http://www.newyorkfed.org/markets/pdcf.html; Tobias Adrian et al., *The Federal Reserve's Primary Dealer Credit Facility*, Current Issues in Economics and Finance, vol. 15, no. 4, August 2009, http://www.newyorkfed.org/research/current_issues/ci15-4.pdf.

of 30 days. The three broad categories of commercial paper issuers are financial firms, nonfinancial firms, and pass-through entities that issue commercial paper backed by assets. The commercial paper issued directly by firms tends not to be backed by collateral, because these firms are viewed as large and creditworthy, and the paper matures quickly.

Individual investors are major purchasers of highly rated commercial paper through money market mutual funds (MMMFs) and money market accounts. On September 16, 2008, a MMMF called the Reserve Fund "broke the buck," meaning that the value of its shares had fallen below par value of $1. This occurred because of losses it had taken on short-term debt issued by Lehman Brothers, which filed for bankruptcy on September 15, 2008. Money market investors had perceived breaking the buck to be highly unlikely, and its occurrence set off a generalized run on MMMFs, as investors simultaneously attempted to withdraw an estimated $250 billion of their investments—even from funds without exposure to Lehman.[64] The decline in commercial paper outstanding after September 2008 is illustrated in **Figure A-2**.

Figure A-2. Commercial Paper Outstanding

(2000:Q1-2015:Q1, quarterly)



Source: Federal Reserve, Z.1 release.

Fearing that disruption in the commercial paper markets could make overall problems in financial markets more severe, the Fed announced on September 19, 2008, that it would create the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF). This facility made nonrecourse loans to banks to purchase asset-backed commercial paper. As the commercial paper matured, the loans were repaid. Because the loans were nonrecourse, the banks had no further liability to repay any losses on the commercial paper collateralizing the loan. At its peak in early October 2008, the AMLF had loans of $152 billion outstanding. However, the AMLF would soon be superseded in importance by the creation of the Commercial Paper Funding Facility (CPFF), and lending fell to zero in October 2009. The AMLF experienced no losses and

[64] Figure cited in Fed Chairman Ben Bernanke, "Financial Reform to Address Systemic Risk," speech at the Council on Foreign Relations, March 10, 2009, http://www.federalreserve.gov/newsevents/speech/bernanke20090310a.htm.

earned income of $0.5 billion over the life of the program. The facility expired on February 1, 2010.

On October 7, 2008, the Fed announced the creation of the CPFF to purchase all types of three-month, highly rated U.S. commercial paper, secured and unsecured, from issuers.[65] The CPFF charged an interest rate equal to the three-month overnight index swap rate plus 1 percentage point for secured corporate debt, 2 percentage points for unsecured corporate debt, and 3 percentage points for asset-backed paper. The CPFF could buy as much commercial paper from any individual issuer as that issuer had outstanding in the year to date. Any potential losses borne by the CPFF would ultimately be borne by the Fed. At its peak in January 2009, the CPFF held $351 billion of commercial paper, and holdings fell steadily subsequently. The facility expired February 1, 2010. It earned income of $6.1 billion over the life of the program and suffered no losses.

In the case of the AMLF, the banks were not intended recipients of assistance, but rather were the intermediary through which assistance flowed to the commercial paper market. According to GAO, 92% of credit extended under AMLF was channeled through two custodial banks (JPMorgan Chase and State Street) that were among the three largest providers of fund administration and account services for MMMFs.[66] The CPFF removed the role of banks as intermediary and provided Fed assistance directly to commercial paper issuers.[67]

On October 21, 2008, the Fed announced the creation of the Money Market Investor Funding Facility (MMIFF) and pledged to lend it up to $540 billion. The MMIFF was planned to lend to private-sector special purpose vehicles (SPVs) that invest in commercial paper issued by highly rated financial institutions. Each SPV would have been owned by a group of financial firms and could only purchase commercial paper issued by that group. The intent was for these SPVs to purchase commercial paper from money market mutual funds and similar entities facing redemption requests to help avoid runs, such as the run on the Reserve Fund. The MMIFF was never accessed, and the facility expired on October 30, 2009.

Term Asset-Backed Securities Loan Facility

On November 25, 2008, the Fed created the Term Asset-Backed Securities Loan Facility (TALF) in response to problems in the market for asset-backed securities (ABS).[68] According to the Fed, "new issuance of ABS declined precipitously in September and came to a halt in October. At the same time, interest rate spreads on AAA-rated tranches of ABS soared to levels well outside the

[65] For more information, see New York Fed documents collection on the CPFF posted at http://www.newyorkfed.org/markets/cpff.html; Tobias Adrian et al., "The Federal Reserve's Commercial Paper Funding Facility," Federal Reserve Bank of New York, *Economic Policy Review*, May 2011, p. 25, http://www.newyorkfed.org/research/epr/11v17n1/1105adri.pdf.

[66] U.S. Government Accountability Office (GAO), *Federal Reserve System: Opportunities Exist to Strengthen Policies and Processes for Managing Emergency Assistance*, GAO-11-696, July 21, 2011, Table 12, http://www.gao.gov/new.items/d11696.pdf.

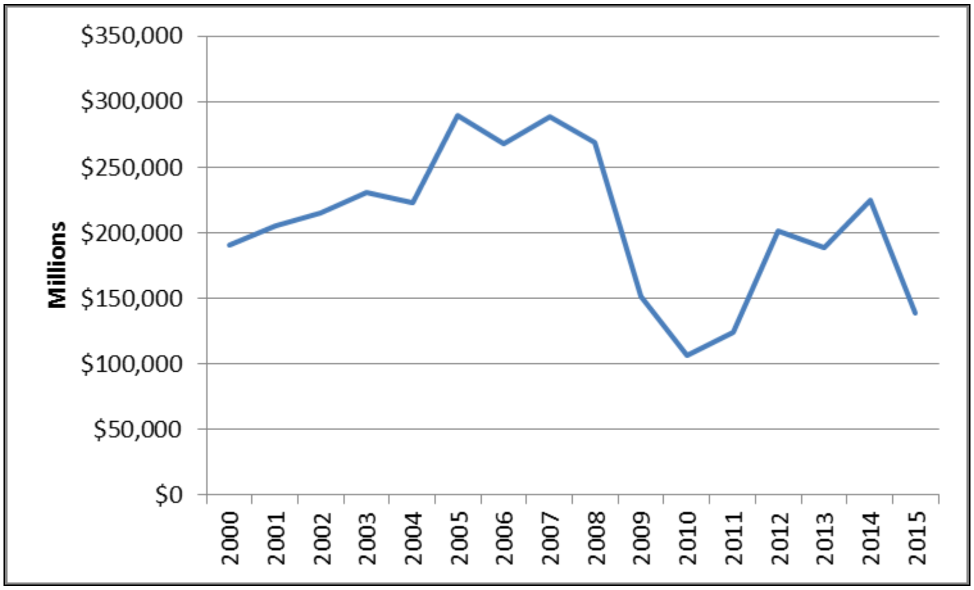
[67] To comply with statute, the CPFF was set up as a special purpose vehicle (SPV) controlled by the Fed that borrowed from the Fed to finance its commercial paper purchases.

[68] For more information, see New York Fed documents collection on TALF posted at http://www.newyorkfed.org/markets/talf.html and http://www.newyorkfed.org/research/epr/12v18n3/1210ashc.pdf; Sumit Agarwal, Jacqueline Barrett, Crystal Cun, and Mariacristina De Nardi, "The asset-backed securities markets, the crisis, and TALF," Federal Reserve Bank of Chicago, *Economic Perspectives*, 4Q/2010, p. 101, https://www.chicagofed.org/~/media/publications/economic-perspectives/2010/4qtr2010-part1-agarwal-barrett-cun-denardi-pdf.pdf.

range of historical experience, reflecting unusually high risk premiums."[69] The decline in ABS issuance is illustrated in **Figure A-3**. The Fed feared that if lenders could not securitize these types of loans, less credit would be extended to consumers, exacerbating the economic downturn.

Figure A-3. Asset-Backed Securities Issuance

(2000-2015, annually)



Source: Securities Industry and Financial Markets Association, data accessed at http://www.sifma.org/uploadedFiles/Research/Statistics/StatisticsFiles/SF-US-ABS-SIFMA.xls?n=55152.

Note: Does not include mortgage-backed securities.

Rather than purchase ABS directly, the Fed made nonrecourse loans to private investment funds to purchase recently issued ABS with the highest credit rating, using the ABS as collateral. The minimum loan size was $10 million. Eligible collateral included new securities backed by auto loans, student loans, small business loans, and credit card loans. TALF was later expanded to include "legacy" commercial MBS. The loans had a term of up to three years for most types of assets (and up to five years for some types of assets), but were repaid when the underlying ABS matured or was sold. Interest rates were set at a markup over different maturities of the London Interbank Offered Rate (LIBOR) or the federal funds rate, depending on the type of loan and underlying collateral.

If the ABS had lost value, because the loans were nonrecourse, the losses would have been borne by the Fed and the Treasury (through TARP) instead of by the borrower—an unusual feature that made TALF riskier for taxpayers than typical Fed lending facilities. The Fed lent less than the market value of the collateral, so the Fed would not have borne losses on the loans until losses exceeded the value of this "haircut" (different ABS receive different haircuts). In addition, Treasury initially set aside $20 billion of TARP funds to cover any losses.[70]

[69] Federal Reserve, "Federal Reserve Announces the Creation of the Term Asset-Backed Securities Loan Facility (TALF)," press release, November 25, 2008.

[70] On July 20, 2010, Treasury reduced its loss exposure to $4.3 billion, maintaining the 10% maximum loss exposure in light of the actual loans outstanding when the program ended.

Peaking at $48 billion, TALF turned out to be a relatively small program compared with the $200 billion program envisioned by the Fed or the $1 trillion program later envisioned by Treasury. In part, this was because the issuance of assets eligible for TALF remained low, which reflected the depressed state of securitization markets and may imply that TALF was unable to overcome investor aversion to ABS. (While TALF was in operation beginning in March 2009, a sizable share of ABS issued were used as collateral for TALF loans. Thus, issuance might have been even lower without the presence of TALF.)

Unlike most other Fed lending facilities, the amount outstanding under TALF steadily rose through 2009. The facility stopped making new loans at the end of June 2010 for loans using newly issued commercial MBS as collateral and in March 2010 for loans using other assets. The last TALF loan was repaid on October 29, 2014. All TALF loans were repaid in full, with interest.[71] Over the life of the program, TALF made profits of $1.6 billion for the Fed and $0.7 billion for the Treasury.

Bear Stearns

Unable to roll over its short-term debt as a result of investor concerns about its mortgage-related losses, the investment bank Bear Stearns faced bankruptcy in 2008. Fearing that Bear Stearns was "too big to fail" and posed systemic risk,[72] the Fed stepped in to broker a merger. On March 14, 2008, the Fed provided a $12.9 billion bridge loan on a nonrecourse basis to JP Morgan Chase to provide Bear Stearns with liquidity, which was repaid with interest. On March 16, JPMorgan Chase agreed to acquire Bear Stearns. As part of the agreement, the Fed agreed to lend $28.82 billion to Maiden Lane I, a Delaware limited liability corporation (LLC) that it created, to purchase financial securities at market value from Bear Stearns. These securities were largely mortgage-related assets that were too illiquid for JPMorgan Chase to be willing to acquire.

Maiden Lane I, not JP Morgan Chase, was to repay the Fed interest and principal using the funds from the sale of the assets. JP Morgan Chase took a first loss position through a subordinated loan of $1.15 billion, receiving an interest rate of 4.5% above the discount rate on that position, compared with an interest rate of 2.5% above the discount rate on the Fed's loan. Any additional losses would be borne by the Fed, and any profits in excess of the loans would accrue to the Fed. Profits or losses for the Fed and JP Morgan Chase were dependent on whether the market value of those assets rose or declined after Maiden Lane I acquired them.

By November 2012, proceeds from the sale or maturation of Maiden Lane I assets were sufficient to fully repay principal and accrued interest to the Fed ($765 million) and JP Morgan Chase. As of December 30, 2014, the value of remaining assets held by Maiden Lane I was $1.7 billion.[73] Once those remaining assets are sold or have matured, the Fed will realize additional capital gains that would be greater or less than $1.7 billion (less expenses), depending on whether the value of those assets subsequently rises or falls.

---

[71] Federal Reserve, *Final Report Pursuant to Section 129(b)*, November 21, 2014, http://www.federalreserve.gov/monetarypolicy/files/129periodicupdate20141121.pdf.

[72] For more information, see CRS Report R42150, *Systemically Important or "Too Big to Fail" Financial Institutions*, by Marc Labonte.

[73] Federal Reserve Bank of New York, *Maiden Lane Transactions*, http://www.newyorkfed.org/markets/maidenlane.html.

American International Group

In September 2008, facing losses on various operations, AIG experienced a significant decline in its stock price and downgrades from the major credit rating agencies.[74] These downgrades led to immediate demands for significant amounts of collateral (approximately $14 billion to $15 billion in collateral payments, according to contemporary press reports).[75] As financial demands on the company mounted, bankruptcy appeared a possibility, as had occurred with Lehman Brothers on September 15, 2008. Many feared that AIG was too big to fail due to the potential for widespread disruption to financial markets resulting from such a failure.

On September 16, 2008 (prior to the existence of TARP), the Fed announced that it was taking action to support AIG in the form of a secured two-year line of credit with a value of up to $85 billion and an interest rate of 8.5 percentage points above the three-month LIBOR. In addition, the government received warrants to purchase up to 79.9% of the equity in AIG. On October 8, 2008, the Fed announced that it would lend AIG up to an additional $37.8 billion against securities held by its insurance subsidiaries.[76]

In early November 2008 (following the creation of TARP), the financial support for AIG was restructured. The restructured financial support consisted of (1) reducing the size of the Fed loan to up to $60 billion, with the term lengthened to five years and the interest rate reduced by 5.5 percentage points; (2) purchasing $40 billion in preferred shares through TARP; and (3) replacing the $37.8 billion loan with up to $52.5 billion total in asset purchases by the Fed through two LLCs known as Maiden Lane II and Maiden Lane III. The 79.9% equity position of the government in AIG remained essentially unchanged after the restructuring of the intervention.

In March 2009, the assistance was restructured further through (1) a partial payback of the Fed loan through a swap of debt for equity in two AIG subsidiaries worth approximately $25 billion, reducing the maximum to $35 billion and (2) commitments for additional future TARP purchases of up to $29.8 billion in preferred shares at AIG's discretion, and the conversion of existing shares into shares with optional dividend payments.[77] The Maiden Lane LLCs continued operating under the previous terms, with the actual loans extended to the LLCs totaling $43.9 billion at their peak.

In September 2010, AIG and the government announced another restructuring of the government's assistance. This restructuring closed on January 14, 2011. The expressed goal was to simplify the government's interest in AIG and provide a path for the government to divest its stake in AIG. The essence of the plan called for (1) ending the Fed's involvement with AIG through loan repayment and transfer of the Fed's equity interests to Treasury and (2) converting the government's $49.1 billion in existing preferred shares into common shares, which could then be sold to the public over time. The specific steps involved several interlocking transactions,

---

[74] For details on the Fed's assistance, see New York Fed, *Actions Related to AIG*, http://www.newyorkfed.org/aboutthefed/aig/index.html. For more information on the federal assistance to AIG, see CRS Report R42953, *Government Assistance for AIG: Summary and Cost*, by Baird Webel.

[75] See, for example, "U.S. to Take Over AIG in $85 Billion Bailout; Central Banks Inject Cash as Credit Dries Up," *Wall Street Journal*, September 17, 2008, pp. A1-A6.

[76] In October 2008, AIG also announced that it had applied to the Fed's broadly available Commercial Paper Funding Facility (CPFF) and was approved to borrow up to $20.9 billion at the facility's standard terms. At its peak use in January 2009, AIG had commercial paper worth $16.1 billion outstanding from the CPFF. AIG continued to access the facility until it expired in February 2010. Over the life of the facility, AIG paid $0.4 billion in interest to the CPFF. AIG's use of the CPFF is included in the CPFF totals, not the AIG totals, in this report.

[77] AIG issued $1.6 billion of additional preferred shares to the government in recognition of accrued, unpaid dividends on the initial $40 billion in assistance.

including the initial public offering of a large AIG subsidiary, the sale of several other AIG subsidiaries, and the use of up to approximately $20 billion in TARP funds to transfer equity interests from the Fed to the Treasury.

All of the Fed loans have been repaid, and the assets held in the Maiden Lane LLCs have been sold. Maiden Lanes II and III were formally terminated on November 12, 2014. The Fed earned interest of $8.2 billion on the loan to AIG and $9.5 billion on the Maiden Lanes. In addition to the income received by the Fed, Treasury received an additional $17.6 billion on the sale of equity that the Fed originally received (and subsequently transferred to the Treasury) as recompense for the Fed's loan to AIG.

Citigroup

On November, 23, 2008, the Treasury, Fed, and Federal Deposit Insurance Corporation (FDIC) announced a joint intervention in Citigroup, which had previously received $25 billion in TARP Capital Purchase Program funding.[78] This exceptional intervention to "[support] financial stability" consisted of an additional $20 billion purchase of preferred shares through the TARP Targeted Investment Program and a government guarantee for a pool of $306 billion in Citigroup assets (reduced to $301 billion when the guarantee was finalized on January 16, 2009) through the TARP Asset Guarantee Program, the FDIC, and the Fed.[79]

In December 2009, Citigroup and Treasury reached an agreement to cancel the asset guarantee. While the asset guarantee was in place, no losses were claimed and no federal funds were paid out. The Fed's share of the termination fee for the asset guarantee was $50 million.[80]

Bank of America

On January 16, 2009, the Treasury, Fed, and FDIC announced a joint intervention in Bank of America, which had previously received $25 billion in TARP Capital Purchase Program funds. Bank of America's losses were largest at Merrill Lynch, which it was in the process of taking over. The Fed and Treasury may have been most concerned that if Bank of America was not offered special assistance, the merger would fall through and Merrill Lynch would experience a disorderly failure. "[A]s part of its commitment to support financial market stability,"[81] this exceptional assistance included the purchase of an additional $20 billion of Bank of America preferred shares through the TARP Targeted Investment Program and a joint guarantee on a pool of up to $118 billion of certain Bank of America assets (largely those acquired through its merger with Merrill Lynch). The announced guarantee was to remain in place for 10 years for residential mortgage-related assets and 5 years for all other assets. Bank of America would have borne up to

[78] U.S. Treasury, "Joint Statement by Treasury, Federal Reserve, and FDIC on Citigroup," press release hp-1287, November 23, 2008.

[79] For information on Citigroup's TARP shares, see CRS Report R41427, *Troubled Asset Relief Program (TARP): Implementation and Status*, by Baird Webel.

[80] U.S. Treasury, "Treasury Prices Sale of Citigroup Subordinated Notes for Proceeds of $894 Million, Providing an Additional Profit for Taxpayers on TARP Citigroup Investment," press release, February 5, 2013, http://www.treasury.gov/press-center/press-releases/Pages/tg1841.aspx; U.S. Treasury, "Taxpayers Receive $10.5 Billion In Proceeds Today From Final Sale Of Treasury Department Citigroup Common Stock," press release, December 10, 2010, http://www.financialstability.gov/latest/pr_12102010.html; Federal Reserve, "Support for Specific Institutions," available at http://www.federalreserve.gov/monetarypolicy/bst_supportspecific.htm.

[81] U.S. Treasury, "Treasury, Federal Reserve, and the FDIC Provide Assistance to Bank of America," press release hp1356, January 16, 2009.

the first $10 billion of losses on the assets, with subsequent losses split 90% to the government and 10% to Bank of America. Within the government, the losses were to be split between the TARP Asset Guarantee Program, the FDIC, and the Fed.

Although the asset guarantee was announced in January 2009, a final agreement was never signed. On September 21, 2009, Bank of America announced that it had negotiated a $425 million termination fee (of which, the Fed received $57 million) that allowed it to withdraw from the Asset Guarantee Program.[82]

Author Contact Information

Marc Labonte
Specialist in Macroeconomic Policy
mlabonte@crs.loc.gov, 7-0640

Acknowledgments

The Appendix is adapted from CRS Report R43413, *Costs of Government Interventions in Response to the Financial Crisis: A Retrospective*, by Baird Webel and Marc Labonte. "Selected Legislation in the 114th Congress" was co-authored with M. Maureen Murphy.

[82] U.S. Treasury, "Asset Guarantee Program," available at http://www.treasury.gov/initiatives/financial-stability/TARP-Programs/bank-investment-programs/agp/Pages/overview.aspx. The termination agreement is available at http://www.treasury.gov/initiatives/financial-stability/programs/investment-programs/agp/Documents/BofA%20-%20Termination%20Agreement%20-%20executed.pdf.