Early Use of Federal Reserve Programs

By Pascal Ungersboeck and Greg Feldberg

Original post here.

After the COVID-19 crisis began, the Federal Reserve quickly announced a number of emergency lending facilities, largely based on programs it first introduced during the Global Financial Crisis of 2007-09 (GFC). These programs have varied in size and speed of implementation. Bank reserve balances at the Fed have reached a historic high in recent weeks, exceeding $3 trillion for the first time, suggesting banks could lend much more.

This post discusses the early use of the following Fed lending programs: (1) primary credit through the discount window, (2) central bank swap lines and FIMA repos, (3) the Money Market Mutual Fund Liquidity Facility (MMLF), (4) the Primary Dealer Credit Facility (PDCF), and (5) the Commercial Paper Funding Facility (CPFF).

In addition to these programs, the Fed announced two facilities to purchase corporate bonds on March 23. The Primary Market Corporate Credit Facility (PMCCF) and Secondary Market Corporate Credit Facility (SMCCF) are not yet operational, as of April 21. Similar programs announced by the European Central Bank (ECB) and Bank of England (BoE) are now operating.

The Discount Window

The discount window is a standing facility the Fed uses to provide collateralized loans to depository institutions. On March 15, the Fed lowered the primary credit rate, the interest rate it charges most banks, from 1.75% to 0.25%, lower than the lowest rate it charged during the GFC. It also said it would provide discount window credit for up to 90 days, rather than 30 days. Discount window lending surged during the following weeks from a negligible amount on March 11 to $28.2 billion on March 18 and $50.8 billion on March 25.

That's faster than the take-up of discount window lending during the GFC. The Fed lowered the primary rate and extended the terms from overnight to 30 days in August 2007 without seeing significant usage (see the Fed's data here). Usage still picked up slowly after the failure of Bear Stearns and the Fed's extension of the terms to 90 days in March 2008. Volumes rose more rapidly amidst the volatile market conditions that followed the failure of Lehman Brothers in September, from under $20 billion to as high as $110 billion in October. It should be noted that during the GFC banks were reluctant to borrow from the discount window out of concern that their borrowing would signal financial weakness. To resolve the issue, the Fed established the Term Auction Facility (TAF) in December 2007. The facility provided term credit to depository institutions without the stigma associated with the discount window. The TAF was heavily used, with $493 billion outstanding at its peak in March 2009.

Central Bank Liquidity Swap Lines and FIMA repos

The swap lines are bilateral agreements between the Fed and foreign central banks. They allow foreign central banks to exchange domestic currency for US dollars in order to satisfy the dollar liquidity demand of local banks and businesses. The Fed operates the swap lines under Section 14 of the Federal Reserve Act. As of March 19, the Fed had established swap lines with 14 central banks. (See the YPFS blog). The Fed swap lines were operational immediately after their announcement and constitute the most used program in recent weeks, with $378.3 billion outstanding as of April 15.

On March 31, the Fed announced a new program to provide dollars to countries with whom it doesn't have swap agreements. The FIMA Repo Facility allows foreign central banks and international monetary authorities to exchange US Treasuries for US dollars. The Fed did not enter into repos with other central banks during the GFC. (See the YPFS blog). There are no outstanding FIMA repos as of April 15.

As for the discount window, swap-line usage has grown much more rapidly this time, compared to the GFC. Then, usage rose to $24 billion in the months after the Fed set up the lines in December, 2007, and to $62 billion during the summer of 2008. But usage expanded rapidly during the month after the failure of Lehman Brothers and reached $583 billion in December.

Currently, the Bank of Japan (BoJ) is the biggest counterparty with 47 percent of the total outstanding amount, followed by the ECB (37%) and the BoE (6%). These same three banks were the biggest counterparties at peak usage during the GFC. The ECB (51%) drew a majority of the funds at the time, followed by the BoJ (22%) and the BoE (8%).

Money Market Mutual Fund Liquidity Facility (MMLF)

The Fed established the MMLF under section 13(3) of the Federal Reserve Act. It allows the Fed to purchase assets from money market mutual funds. The Fed announced the program on March 18 and it became operational on March 23. The current program is similar to the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) announced on September 19, 2008, and operational three days later. Under the MMLF, the Federal Reserve Bank of Boston makes direct loans to borrowers, allowing for rapid implementation. (See the YPFS blog).

The MMLF is the most used program that the Fed has established under section 13(3) during the current crisis so far, with $50.7 billion outstanding as of April 15. It has been less used in the first month than its GFC counterpart, the AMLF. That program peaked within two weeks of its announcement at $152 billion outstanding on October 2, 2008, indicating the dire conditions in money markets following Lehman's failure.

Primary Dealer Credit Facility (PDCF)

The Primary Dealer Credit Facility allows the Fed to extend collateralized loans to primary dealers under section 13(3). The program was announced on March 17, and became operational three days later. During the GFC, the PDCF was among the first programs the Fed announced. It was announced on March 16, 2008, and became operational the next day. (See the YPFS blog).

Currently, $33 billion is outstanding through the facility. Current use is very similar to the use of the program during its first four weeks of 2008. Under the PDCF, the Federal Reserve Bank of New York provides loans through a clearing bank. Collateral is assigned to a FRBNY account within the clearing bank. The use of the established financial infrastructure with primary dealers allowed for fast implementation.

Commercial Paper Funding Facility (CPFF)

The CPFF provides a liquidity backstop to issuers of commercial paper and was also established under section 13(3). The Fed announced the program on March 17 and the facility became operational on April 14. The CPFF took longer to implement because its operations require the Fed to engage in transactions that fall outside its traditional operating framework. To extend its reach, the Federal Reserve Bank of New York set up a special purpose vehicle, the Commercial Paper Funding Facility II LLC (CPFF II LLC), held in custody at State Street. Operations are conducted through the SPV while primary dealers serve as intermediaries for issuance requests. All issuers are required to register at least two days prior to their first issuance, registration began on April 7. The additional time required to build the facility's infrastructure explains the operational delay. (See the YPFS blog). As of April 15, the facility had just $974 million outstanding. During the GFC, the Fed announced a similar CPFF program on October 7, 2008, and it became operational on October 27. The earlier CPFF was heavily used immediately, with $270 billion outstanding within 4 weeks of its launch.

Recently, Japan and the UK have implemented similar programs. The BoE's commercial paper facility, Covid Corporate Financing Facility (CCFF), was announced on March 17 and opened for drawings within five days. (See the YPFS blog). The Bank of Japan announced more frequent auctions and increased amounts for outright commercial paper auctions on March 16, with a first auction two days later. (See the YPFS blog).

Summary table

CB Swaps				AMLF / MMLF				PDCF			
GFC		COVID		GFC		COVID		GFC		COVID	
12/25/07	24,000	2/26/20	44	9/24/08	72,667	2/26/20	-	2/20/08	-	2/26/20	-
1/1/08	24,000	3/4/20	48	10/1/08	152,108	3/4/20	-	2/27/08	-	3/4/20	-
9/17/08	62,000	3/11/20	58	10/8/08	139,481	3/11/20	-	3/5/08	-	3/11/20	-
9/24/08	141,900	3/18/20	44	10/15/08	122,763	3/18/20	-	3/12/08	-	3/18/20	-
10/1/08	286,432	3/25/20	206,051	10/22/08	107,895	3/25/20	30,634	3/19/08	28,800	3/25/20	27,718
10/8/08	335,184	4/1/20	348,544	10/29/08	96,010	4/1/20	52,667	3/26/08	37,023	4/1/20	33,050
10/15/08	406,882	4/8/20	358,077	11/5/08	85,097	4/8/20	53,171	4/2/08	34,443	4/8/20	33,018
10/22/08	477,159	4/15/20	378,291	11/12/08	76,546	4/15/20	50,656	4/9/08	26,479	4/15/20	33,409

DW				FIMA Repos				CPFF			
GFC		COVID		GFC		COVID		GFC		COVID	
8/27/08	18,901	2/26/20	13			2/26/20	-	10/1/08	-	2/26/20	-
9/3/08	19,000	3/4/20	1			3/4/20	-	10/8/08	-	3/4/20	-
9/10/08	23,455	3/11/20	11			3/11/20	-	10/15/08	-	3/11/20	-
9/17/08	33,401	3/18/20	28,224	NA		3/18/20	-	10/22/08	-	3/18/20	-
9/24/08	39,327	3/25/20	50,768			3/25/20	-	10/29/08	144,808	3/25/20	-
10/1/08	49,524	4/1/20	43,744			4/1/20	-	11/5/08	243,305	4/1/20	-
10/8/08	98,107	4/8/20	43,449			4/8/20	1	11/12/08	257,287	4/8/20	-
10/15/08	101,853	4/15/20	36,284			4/15/20	-	11/19/08	270,879	4/15/20	974

Data compiled by authors from https://www.federalreserve.gov/releases/h41/