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Alphabet soup

Fed special

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Summary

- On Sunday, the Fed set the discount window and the USD liquidity swap lines with 5 key central banks further open.
- On Tuesday, the Fed relaunched the CPFF and a few hours later the PDCF.
- On Wednesday, the Fed established the MMLF.
- Today, the Fed reopened the USD liquidity swap lines with a wider set of central banks.
- In this special we give an overview of the special lending facilities that are now in place, the special lending facilities from the previous financial crisis that are likely to make a comeback, and a few novel special lending facilities that could become reality.

Introduction

On [Sunday](#), the Fed set the discount window and the USD liquidity swap lines with 5 key central banks further open. However, commercial paper markets were freezing up. The coronavirus outbreak is hitting the cashflow of businesses, who therefore need to raise cash. At the same time, the money market mutual funds – the regular buyers of commercial paper – are also trying to raise cash in anticipation of outflows from the mutual funds by investors. In other words, the commercial paper market had increasingly become dysfunctional. On Tuesday, the Fed relaunched two special lending facilities from the financial crisis, the [Commercial Paper Funding Facility \(CPFF\)](#) and the Primary Dealer Credit Facility (PDCF). While CPFF helps issuers of commercial paper, and PDCF supports primary dealers who remained stuck with large inventories of commercial paper, money market mutual funds were still in need of liquidity. So on Wednesday, the Fed established the Money Market Mutual Fund Liquidity Facility (MMLF). Today, in response to the global need for USD liquidity, the Fed reopened the USD liquidity swap lines they closed in 2010 with a range of non-G7 central banks.

As we indicated in [Crash to zero](#) a week ago, we expected the Fed to deploy a range of special lending facilities from the financial crisis. Several were indeed deployed in recent days. In this special we give an overview of the special lending facilities that are now in place, and the special lending facilities from the previous crisis that are likely to make a comeback.

The standard lending facility: the discount window

The Fed is the lender of last resort in the US financial system. In normal times, the Fed operates a standard lending facility that is accessible only to depository institutions, the discount window. This excludes a range of financial institutions and all non-financial firms, but under normal

circumstances it is enough for the Fed to provide a backstop for depository institutions, who then in turn provide liquidity to other financial institutions and all non-financial businesses and households. When the US financial system comes under stress, the Fed may first try to stabilize the system by setting the discount window further open. On Sunday, the Fed extended the discount window to 90 days and slashed the primary credit rate by 150 bps to 0.25%. By providing liquidity to banks through the discount window the Fed tries to make sure that banks don't have to withdraw credit to their customers during times of market stress. In this way, the Fed could support the smooth flow of credit to households and businesses.

Special lending facilities

The discount window is the Fed's standard lending facility. However, it is restricted to depository institutions and there is a stigma to borrowing at the discount window. On Sunday, the Fed tried to reduce this stigma by encouraging banks 'to turn to the discount window to help meet demands for credit from households and businesses at this time.' In order to make this more attractive the Fed slashed the primary credit rate by 150 bps to 0.25%. This means that the spread between the primary credit rate and the top of the target range for the federal funds rate was reduced from 50 bps to zero. The discount window was also extended to 90 days.

However, when the financial system comes under stress and widening the discount window is not enough to stabilize the financial system the Fed also has the possibility to deploy special lending facilities. The special lending facilities are based on section 13(3) of the Federal Reserve Act, which is a 'unusual and exigent circumstances' clause. Unfortunately, after the financial crisis the US Congress – through the Dodd-Frank Act of 2010 – made it more difficult for the Fed to use this clause. The Fed needs the approval from the US Treasury Secretary. Why wasn't CPFF included in Sunday's emergency package when the Fed cut rates to zero, launched a new large scale asset purchase program, and set the discount window and USD swap lines wide open? Markets were screaming for CPFF. On Tuesday, Mnuchin sent a letter to Powell giving him permission to start CPFF2020. It seems that Congress has tied the Fed's hands and this has not been beneficial to market functioning as we found out in this week. Perhaps something to reconsider once this crisis is over.

In this special, we try to discuss the 'alphabet soup' of special lending facilities in a systematic manner, by focussing on the beneficiaries of the special lending facilities. We start with the depository institutions, which even in normal circumstances have access to the Fed's standard lending facility: the discount window. Then we look at the primary dealers, money market mutual funds, CP issuers, ABS issuers and foreign central banks.

Table 1: Beneficiaries of the Fed's lending facilities

<i>Beneficiaries</i>	<i>Fed lending facilities</i>
Depository institutions	Discount window, TAF*
Primary dealers	PDCF, TSLF*
Money market mutual funds	MMLF, MMIFF*
CP issuers	CPFF
ABS issuers	TALF*
Foreign central banks	USD liquidity swap lines

Source: Rabobank (* not relaunched yet at time of writing)

Term Auction Facility (TAF)

If it turns out that the stigma of going to the discount window is holding back depository institutions too much, the Fed may relaunch a special lending facility known as the Term Auction Facility (TAF). Through TAF the Fed provided term loans to depository institutions, collateralized by standard discount window collateral. However, the funds were allocated through an auction, so that banks would not face the stigma of going to the discount window to ask for a loan. So TAF is basically the discount window without the stigma. During the financial crisis, TAF was the first and largest special lending facility employed by the Fed.

On Sunday, the Fed tried to make the discount window more attractive by slashing the primary credit rate to 0.25% and encouraging banks to use the discount window, but if these incentives would fail to get banks to the discount window – because of the stigma attached to it – then relaunching TAF could help alleviate bank funding strains. In fact, on Tuesday Loretta Mester (Cleveland Fed) mentioned TAF in addition to CPFF.

Primary Dealer Credit Facility (PDCF)

While primary dealers play a crucial role in the financial system, they have no access to the discount window if they are not part of a depository institution. The Primary Dealer Credit Facility (PDCF) provides funding to primary dealers, similar to the way the discount window provides a backup source of funding for depository institutions. On Tuesday March 17, the Fed relaunched PDCF. The PDCF will offer overnight and term funding with maturities up to 90 days. A broad range of collateral is allowed if primary dealers want to use this facility, including investment grade corporate debt securities, international agency securities, commercial paper, municipal securities, MBS, and ABS and equity securities. In case of ABS, only AAA-rated CMBS, CLOs and CDOs are accepted. In case of equity securities, ETFs, unit investment trusts, mutual funds, rights and warrants are excluded. Additional collateral may become eligible at a later date upon further analysis by the Fed. Note that PDCF supports primary dealers who remained stuck with large inventories of commercial paper in recent days when the commercial paper market became dysfunctional.

The loans under the PDCF will be made at a rate equal to the primary credit rate. So in practice this is a 'discount window' for primary dealers against a broad range of collateral. In this way, the Fed acts as a lender of last resort to primary dealers, who – if not part of a depository institution – have no access to the discount window. The PDCF is established under Section 13(3) of the Federal Reserve Act, with approval of the Treasury Secretary. The PDCF will be in place for at least 6 months and may be extended as conditions warrant. Note that during the financial crisis the PDCF only offered overnight funding. However, the 2020 version of PDCF offers term funding up to 90 days.

Term Securities Lending Facility (TSLF)

During the financial crisis, depository institutions had access to the discount window and TAF. Analogously, the Fed created the PDCF and the TSLF for primary dealers. The roles of the discount window, TAF, PDCF and TSLF can be summarized in the following table:

Table 2: Lending facilities for depository institutions and primary dealers

	<i>Depository institutions</i>	<i>Primary dealers</i>
Standing facility	Discount window	PDCF
Auction	TAF	TSLF

Source: Rabobank

The PDCF is a standing facility for primary dealers, while TSLF is an auction for primary dealers. In TSLF auctions the Fed loaned Treasury securities to primary dealers for one month against collateral that consisted of less liquid securities. An important difference between TSLF and TAF is that in TSLF the Fed offers securities for securities, while in TAF the Fed offers funds from the Federal Reserve in exchange for securities and loans. In combination, the PDCF and the TSLF offered the primary dealers access to funds and Treasury securities against a broad range of collateral. Following the widening of the discount window and the relaunch of the PDCF, we are likely to see a relaunch of TSLF (and TAF) in the coming days or weeks.

Money Market Mutual Fund Liquidity Facility (MMLF)

After discussing the Fed's lending facilities for depository institutions and primary dealers, now we turn to the money market mutual funds. On Wednesday, March 18, 2020 the Fed established the Money Market Mutual Fund Liquidity Facility (MMLF). The Boston Fed will make loans of up to 12 months available to eligible financial institutions secured by high-quality assets purchased by the financial institution from money market mutual funds. The aim of the MMLF is to help money market mutual funds in meeting demands for redemptions by households and other investors. Note that money market funds were scrambling for liquidity in anticipation of withdrawals. This also meant that they were not buying commercial paper from businesses. By introducing CPFF the Fed helped those businesses, but money market mutual funds kept struggling. Through the MMLF the Fed is stimulating financial institutions to buy assets from the money market mutual funds, so that they don't have to sell them at a large discount if they are forced to sell when investors withdraw their money from the mutual funds. Eligible financial institutions are all US depository institutions, US bank holding companies, US branches and agencies of foreign banks. Eligible collateral consists of two types with different rates at which the loan is made. The primary credit rate applies to US treasuries and fully guaranteed agencies and securities issued by US government sponsored entities. The primary credit rate plus 100 bps for ABCP or unsecured CP issued by a US issuer, rated not lower than A1, F1 or P1 if rated by at least two major rating agencies or in the top rating if rated by only one major rating agency.

The MMLF is in structure very similar to the **Asset-Backed Commercial Paper Money Market Fund Liquidity Facility (AMLF)** that operated from late 2008 to early 2010. The main difference is that MMLF will purchase a broader range of assets from financial institutions. The AMLF provided funding for depository institutions purchasing asset-backed commercial paper from money market mutual funds. This facility peaked at \$140bn in 2008.

Money Market Investor Funding Facility (MMIFF)

Related to AMLF, in 2008-2009 the Fed also established the Money Market Investor Funding Facility (MMIFF). This facility was designed to provide liquidity for money market mutual funds, stimulating them to extend the term of their money market investments. Instead of scrambling for overnight assets because of liquidity fears, this would help maintain demand for term securities in the money market. Although no loans were made under the MMIFF, the facility could still be useful this time if MMLF would not be enough to support the money market mutual funds.

Commercial Paper Funding Facility (CPFF)

Markets were screaming for it, but finally on Tuesday, March 17, the Fed relaunched the Commercial Paper Funding Facility (CPFF) in order to deal with the freezing up of the US commercial paper market. At present, the coronavirus outbreak is hitting the cashflow of businesses, who therefore need to raise cash. At the same time, the money market mutual funds – the regular buyers of commercial paper – are also trying to raise cash in anticipation of outflows

from the MMMFs by investors. In other words, the commercial paper market had increasingly become dysfunctional. The reintroduction of the CPFF brings in the Fed as a large buyer of commercial paper and should help stabilize the market.

Through this facility the Fed finances a special purpose vehicle (SPV) that purchases 3 month commercial paper from eligible users. In this way the Fed takes over the role of money market mutual funds and other buyers of commercial paper that stopped purchasing in recent days. This also reduces the pressure on banks providing credit to issuers unable to sell commercial paper anymore. By providing a liquidity backstop for issuers of commercial paper the Fed hopes to stabilize the commercial paper market. For more technical details we refer to our special report [CPFF2020](#). Note that through this channel the Fed is also able to provide liquidity to businesses, not only depository institutions which already have access to the Fed's discount window.

During the financial crisis the Commercial Paper Funding Facility (CPFF) was the second largest special funding facility. In this way the Fed took over the role of money market mutual funds and other buyers of commercial paper that were afraid to purchase unsecured debt during the financial crisis. This stabilized the commercial paper market and provided a liquidity backstop for issuers of commercial paper.

Term Asset-Backed Securities Loan Facility (TALF)

Stress in the financial system may also affect the market for asset backed securities (ABS). During the financial crisis the Fed came to the rescue of issuers of ABS by establishing a special lending facility. The Term Asset-Backed Securities Loan Facility (TALF) was launched in March 2009 after interest rates on ABS rose and issuance fell sharply in late 2008. Through TALF the Fed provided loans in exchange for certain AAA-rated ABS backed by newly and recently originated consumer and small business loans. The Treasury Department provided \$20bn of credit protection to the New York Fed in connection with the TALF. Through this facility the Fed tried to support the issuance of ABS. Problems in the ABS markets could lead to a relaunch of TALF.

USD and foreign currency liquidity swap lines

After discussing the Fed's special lending facilities for US depository institutions, primary dealers, money market mutual funds, and issuers of CP and ABS we turn to the international dimension of liquidity provision. The crucial role that the USD plays in the international financial system is also reflected in the fact that the USD liquidity swap lines with 5 other central banks never went away.¹ Also, the foreign currency liquidity swap lines that came in reciprocity were never used by the Fed, except for some pre-arranged small-value test operations.

On Sunday, the Board of Governors enhanced the standing USD liquidity swap line arrangements with the Bank of Canada, the Bank of England, the Bank of Japan, the ECB and the Swiss National Bank by offering 84-day maturity, in addition to the 1-week maturity operations currently offered, and by reducing the pricing by 25 bps to OIS+25bps.

On Thursday, in response to the global need for USD liquidity, the Fed reopened the swap lines they closed in 2010 with a range of central banks of non-G7 countries: the Reserve Bank of Australia, the Banco Central do Brasil, the Danmarks Nationalbank, the Bank of Korea, the Banco de Mexico, the Reserve Bank of New Zealand, the Norges Bank, the Monetary Authority of Singapore, and the Sveriges Riksbank. These USD liquidity arrangements will be in place for at least 6 months.

¹ Since 1994 there have also been swap lines with the Bank of Canada and the Banco de Mexico under the North American Framework Agreement.

In the coming days and weeks, the USD liquidity swap lines could be extended to an even wider set of central banks, longer maturities could be offered and pricing could be reduced further. Of course, the main question is whether the Fed will open a USD liquidity swap line with the People's Bank of China.

Table 3: USD liquidity swap lines: permanent and temporarily reopened

<i>Permanent USD liquidity swap lines</i>	<i>USD liquidity swap lines reopened</i>
Bank of Canada	Reserve Bank of Australia
Bank of England	Banco Central do Brasil
Bank of Japan	Danmarks Nationalbank
European Central Bank	Bank of Korea
Swiss National Bank	Banco de Mexico
	Reserve Bank of New Zealand
	Norges Bank
	Monetary Authority of Singapore
	Sveriges Riksbank

Source: Rabobank

What's next?

Now that CPFF and PDCF have been relaunched, MMLF has been established, and USD liquidity swap lines have been expanded to a range of non-G7 central banks it is only a matter of time before the rest of the Fed's emergency toolkit from the previous financial crisis is reinstated. We may see the return of TAF, TSLF, MMLFF, TALF and the opening of new USD liquidity swap lines. We could also see new facilities, for example targeted at corporate debt, and focussed on lending to small businesses and households. After all, in contrast to the Great Recession, the current shock did not come from the financial system but from the real economy. Consequently, special lending facilities should be aimed more directly at businesses and households.

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A summary of the methodology can be found on our website www.rabobank.com

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