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The Fed's finest hour

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- In a remarkable announcement this morning, the Fed detailed steps to provide $2.3tn to support the economy. The Fed delivered on three critical fronts we foreshadowed in a recent note (see "What will the Fed buy on its $4.5 trillion shopping spree?"): the corporate credit facilities would support lending for large businesses, the Main Street Business Lending Program (MSBLP) would boost liquidity for loans to small-and-medium sized businesses, and the Fed would further support the muni bond market.
- Of the ~$450bn of equity from the Treasury, the two corporate credit facilities will receive a combined $75bn, allowing for a market footprint up to $750bn. In a somewhat surprising development, Fed purchases will include "fallen angels", or bonds that have been recently downgraded below investment grade, and portions of syndicated loans. In addition, a portion of its ETF purchases in the Secondary Market Corporate Credit Facility will be allocated to high yield ETFs. The expanded scope of purchases in the corporate market gave a substantial lift to risk assets.
- In terms of the other facilities, the MSBLP will receive $75 billion of equity, allowing for Fed purchases of up to $600bn in loans. Meanwhile, the newly established Municipal Liquidity Facility will offer up to $500bn of lending to states and municipalities backed by $35bn in funding from the Treasury.
- Today's actions were an example of the kind of leadership required at this critical juncture. As Chair Powell noted, the Fed will "continue to use these powers forcefully, proactively and aggressively". We anticipate the Fed will continue to flexibly and innovatively use its expanded toolkit to achieve its mandates. Indeed, the Fed has only allocated about half of the capital given by Treasury, and thus has plenty of dry powder to further support markets.

Figure 1:Summary of the Fed's lending facilities

Fed SPV	Current Treasury Investment	Implied Leverage	Maximum Leveraged Capacity
Primary Corporate Credit Facility (PMCCF)*	50	10	750
Secondary Market Corporate Credit Facility (SMCCF)*	25		
Main Street Loan Facilities (MSNLF and MSELF)	75	8	600
Municipal Liquidity Facility	35	14	500
Paycheck Protection Program Lending Facility	N/A	N/A	350
Term Asset-Backed Securities Loan Facility (TALF)	10	10	100
Primary Dealer Credit Facility (PDCF)	N/A	N/A	
Money Market Mutual Fund Liquidity Facility (MMLF)	10	10**	
Commercial Paper Funding Facility (CPFF)	10	10**	
Total	215		2300

** The corporate facilities capacity is not presented separately. The SMCCF will lever 10 to 1 for IG bonds and ETFs; 7 to 1 for sub-IG bonds; and between 3 to 1 and 7 to 1 for other eligible assets. The PMCCF will lever 10 to 1 for IG bonds or syndicated loans and 7 to 1 for other assets.*

*** Leverage was not specified for the MMLF and the CPFF. Since they only accept highly rated assets as collateral we assume 10 to 1.*

Source : Federal Reserve Board, Deutsche Bank

The primary/secondary market corporate credit facilities

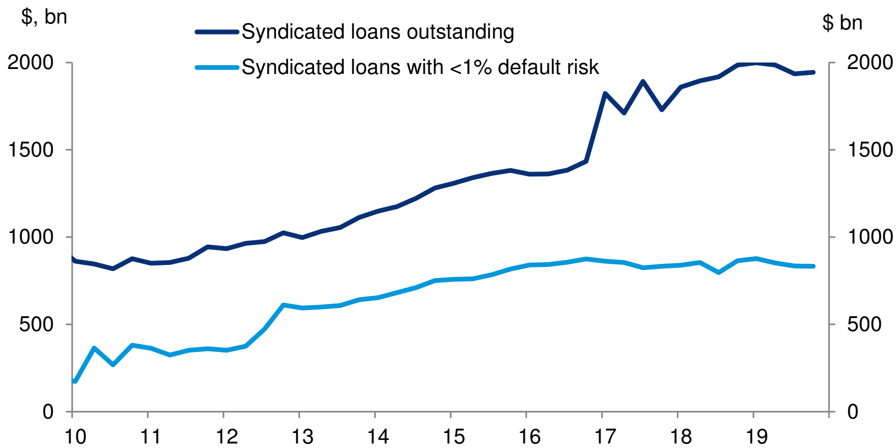
The two corporate credit facilities will receive a combined $75bn, allowing for a market footprint up to $750bn. As the updated term sheets for the PMCCF and SMCCF illustrate, Fed purchases will include "fallen angels", or bonds that have been recently downgraded below investment grade (after March 22), and portions of syndicated loans. In addition, the Fed indicated that it will allocate a portion of its ETF purchases within the SMCCF to high yield ETFs. The expanded scope of purchases in the corporate market have resulted in a substantial lift to risk assets. By supporting the flow of credit to companies below investment grade, this step by the Fed should help businesses to keep employees on their payrolls during a critical period.

As our colleague Craig Nicol in US credit strategy noted (See "The work from home kitchen sink for US credit") the potential size of the two facilities equates to roughly 15% of the entire USD IG non-financial universe and 12% of the USD IG and HY non-financial universe combined. This is a material backstop for the credit market both in absolute and relative terms. With nearly $90bn of fallen angels since March 22 (of which $56bn will be eligible for the Fed to purchase) and a significantly larger amount of bonds sitting on the edge of HY, the inclusion of fallen angels in eligible purchases provides meaningful support for the HY market. While the expansion to HY ETFs will still remain secondary to the Fed purchasing predominantly IG ETFs, this is still a significant statement of intent especially given the generous limit of being able to hold up to 20% of any particular ETF.

The PMCCF will also help facilitate market access to companies that may have recently lost access to capital markets as well as encourage these firms to refinance at lower rates. While new issuance has been brisk this year, it has also skewed towards only the highest rated companies. The fact that the Fed is willing to include "fallen angels" in the program should help in this regard. Issuers may also approach the facility to refinance outstanding debt (three months ahead of the maturity date), and may issue additional debt at any time, provided their rating is reaffirmed at BB-/ Ba3 or above.

Finally, the facility will now purchase portions of syndicated loans or bonds at issuance, which is another positive with respect to restoring the flow of credit. The Facility may purchase no more than 25 percent of any loan syndication or bond issuance. As Figure 2 illustrates, according to the FDIC there were $1.9 trillion of outstanding syndicated loans for depository institutions and other financial institutions as of Q4 2019, $850bn of that total was previously classified as having less than a 1% default risk.

Figure 2: Depository and other financial institutions outstanding syndicated loans



Source : FRB, Haver Analytics, Deutsche Bank

Main Street Business Lending Program

Next, the Fed unveiled its highly-anticipated Main Street Business Lending Program, which will consist of two complimentary facilities with a combined size of $600bn backed by a $75bn Treasury investment. This facility attempts to address the needs of small-and-medium sized businesses with up to 10,000 employees or up to $2.5 billion in 2019 annual revenues. This innovative structure is effectively a public/private partnership with banks and the Fed sharing risk on a pari passu basis. The Fed will be purchasing 95% of participations in eligible loans with lenders retaining 5%. This should be a boost to the SME loan market, though there are some constraints.

The Main Street New Loan Facility (MSNLF) will address the new loan market (originations on/after April 8) while the Main Street Expanded Loan Facility (MSELF) will address upsizing of existing loans (made before April 8). As the term sheet for the MSNLF indicates, loans will be $1mn up to a maximum of $25mn with a 4 year borrowing term. The term sheet for the MSELF stipulates a maximum of $150 million on the loan size. The terms for both will be made at an adjustable rate of SOFR + 250-400 bps, which is broadly consistent with market pricing for higher-rated companies. Importantly, the Fed will attempt to mitigate some of the moral hazard associated with bailing out highly leveraged firms by capping the leverage ratio of companies receiving new loans at 4x's EBITDA and those receiving upsized loans at 6x's EBTIDA. This is noteworthy as issuance of leveraged loans over the last several years has been skewed towards those firms over 6x's EBITDA.[1]

Finally, borrowers must attest that they require financing due to the exigent circumstances presented by the COVID-19 pandemic, and that, using the proceeds of the eligible loan, it will make reasonable efforts to maintain its payroll and retain its employees during the term of the loan. Companies will also not be able to repurchase stock and will have to meet certain compensation restrictions.

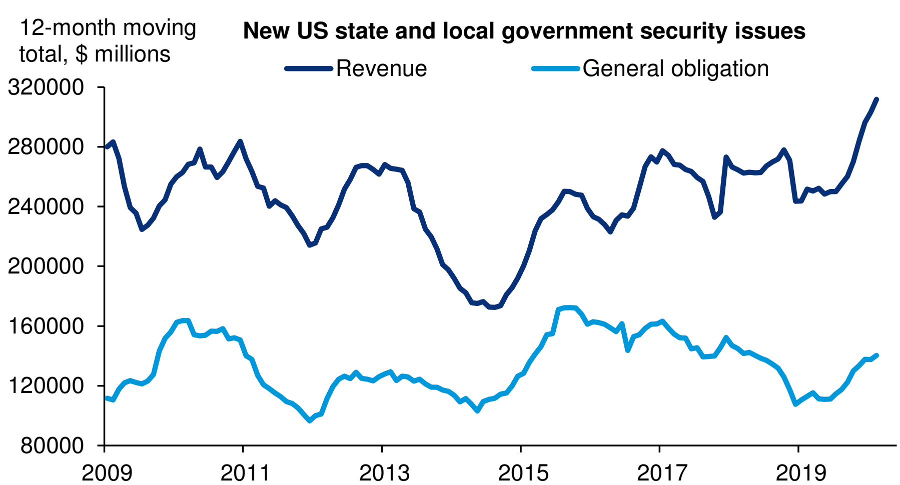
1 https://www.federalreserve.gov/publications/2019-november-financial-stability-report-borrowing.htm

The Municipal Liquidity Facility (MLF)

While the Fed was already able to purchase shorter-dated municipal paper 12-months and under through its money market mutual fund and commercial paper facilities. The Municipal Liquidity Facility (MLF) will take that one step further by buying short-term paper directly from issuers. The MLF will be able to purchase up to $500bn of short-term notes from U.S. states and the District of Columbia, U.S. cities with a population exceeding one million and counties with a population exceeding two million. As the term sheet states, the MLF will purchase tax anticipation notes (TANs), tax and revenue anticipation notes (TRANs), bond anticipation notes (BANs), and other similar short-term notes issued by eligible issuers, provided that such notes mature no later than 24 months from the date of issuance. Eligible state-level issuers may then use the proceeds to support additional counties and cities.

As Figure 3 indicates, there has been roughly $4trn in muni issuance over the 12 months ending in February. While we do not have the latest data for March, anecdotes suggest there has been very little issuance and the market remains significantly impaired. The Fed is basically attempting to jump-start the market by providing bridge financing to the largest entities and then allowing them to direct funds to smaller municipalities. Pricing will be based on an issuer's rating at the time of purchase with details to be provided later.

Figure 3: The $4 trillion muni market remains a substantial source of uncertainty



Source : FRB, Haver Analytics, Deutsche Bank

Paycheck Protection Program Lending Facility

The Fed filled in the details on its term funding facility that will provide financing backed by loans made through the Payroll Protection Program (PPP). As the term sheet indicates, the Fed will basically provide matched maturity funding to banks taking PPP loans as collateral. At the same time, PPP loans will be assigned a a risk weight of zero percent under the risk-based capital rules of the federal banking agencies. In short, this facility and associated rule change should remove near-term concerns that banks may have with respect to running afoul of leverage capital ratios while in the process of acting as an agent for the Small Business Association PPP loans.

Term Asset-Backed Securities Loan Facility (TALF)

The TALF will enable the issuance of asset-backed securities (ABS) backed by student loans, auto loans, credit card loans, loans guaranteed by the Small Business Administration (SBA), and certain other assets. Today's announcement basically kicked off the program, accepting eligible ABS issued on or after March 23. All U.S. companies that own eligible collateral and maintain an account relationship with a primary dealer are eligible to borrow under the TALF. Loans under the TALF are secured by a pledge of eligible ABS. Eligible ABS would be AAA-rated ABS for which all or substantially all of the underlying credit exposures are newly or recently originated exposures to U.S. borrowers. The Fed's term sheet outlines the potential range of collateral which includes auto loans, credit card receivables and certain SBA-guaranteed loans as well as pricing. Each loan made under TALF will have a three-year maturity. Further guidance was provided on eligible collateral, valuation haircuts and pricing for specific assets. Note that the Fed will not accept single-asset single-borrower CMBS and commercial real estate collateralized loan obligations.

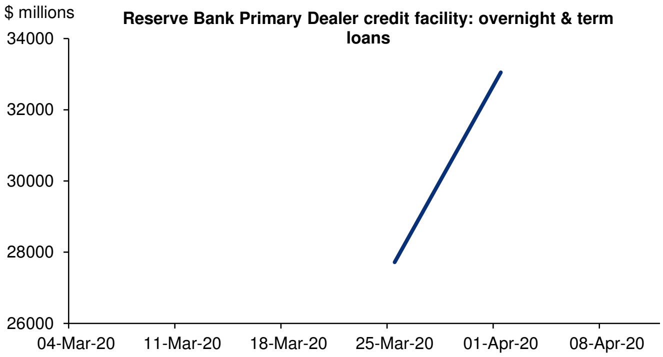
Recall that in TALF 1.0 during the financial crisis, the program was sized to $200 billion in available loans (vs. $100 billion for the new TALF), but uptake came in at only $71 billion. TALF 2.0 will initially make up to $100 billion of loans available with a $10bn investment from the treasury. According Kayvan Darouian from our ABS research team, on a new issue basis, the ABS market has been running at roughly $230 billion annually (roughly half of it auto ABS) over the last three years. As our CLO team led by Conor O'Toole noted (See "AAA static CLOs in TALF - leveraged loan market supported"), the facility should act to clear the backlog of hung leveraged loans on arranging bank balance sheets and support overall pricing in the market.

Primary Dealer Credit Facility

The Primary Dealer Credit Facility (PDCF) will provide credit to primary dealers in exchange for a broad range of collateral for term funding with maturities up to 90 days. As the term sheet states collateral eligible for pledge under the PDCF includes all collateral eligible for pledge in open market operations (OMO); plus investment grade corporate debt securities, international agency securities, commercial paper, municipal securities, mortgage-backed securities, and asset-backed securities; plus equity securities. Thus far, the facility has provided roughly $33bn in collateralized loans to dealers (Figure 4). In essence, this is a repo facility similar to the discount window but only available to primary dealers whereas the discount window is open to all depository institutions.

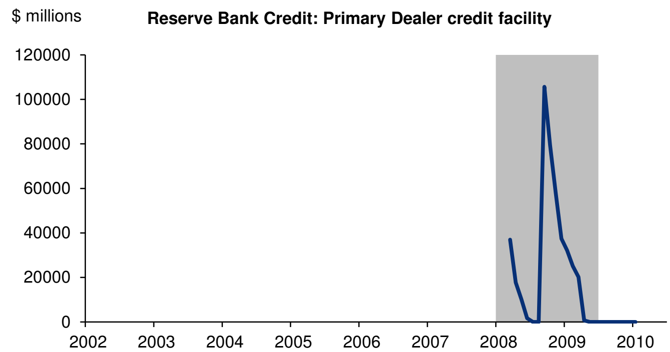
Relative to the 2008 - 2010 PDCF, this latest version provides term funding for assets of up to 90 days versus only overnight loans during the financial crisis. As Figure 5 indicates, usage of this facility surged to around $120bn during the last crisis. However, the heaviest usage of the TALF in 2008 was the result of the Lehman bankruptcy. Hence, absent a systemically large banking organization running into severe trouble, we do not see usage rising nearly that high. Note that since all loans from this facility are fully collateralized, it does not require a Treasury backstop.

Figure 4: The PDCF has issued $33bn in loans



Source : FRB, Haver Analytics, Deutsche Bank

Figure 5: At its peak during the last crisis, the PDCF provided a little over $100bn of loans



Source : FRB, Haver Analytics, Deutsche Bank

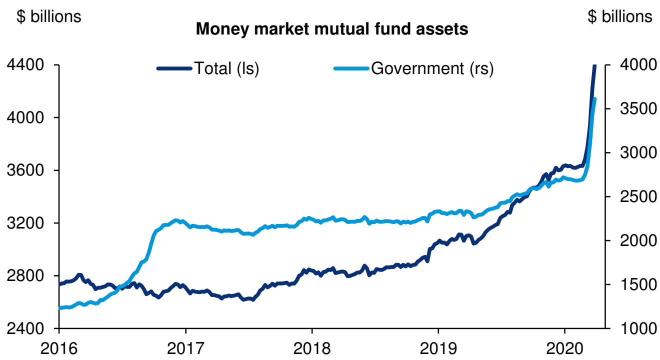
Money Market Mutual Fund Liquidity Facility (MMLF)

The MMLF aims to provide liquidity to money market mutual funds by lending to banks against short-term collateral (12-months and under) purchased from prime money funds, single-state or other tax exempt funds. In short, it alleviates strains on dealer balance sheets from money market fund assets being sold to them by funds that have to sell assets to meet redemptions. The Fed's term sheet outlines the list of list of eligible borrowers and collateral.

As Figures 6 illustrates, money market mutual fund assets outstanding are roughly $4.4trn with the vast majority ($3.6trn) of that sitting in government backed funds. Figure 7 shows the recent dynamics of this market. Investors are exiting prime ($654bn) and tax exempt funds ($130bn) given elevated risks to near-term cash flows, and fleeing into the safety of government funds. In turn, MMLF loans will likely be focused on the former two sectors. As noted in a weekly tracker of Fed facilities we produce in conjunction with our colleagues in rates strategy (See "Following the Fed facilities' footprints April 1 data"), the Fed has provided roughly $53bn of loans via this facility as of April 1.

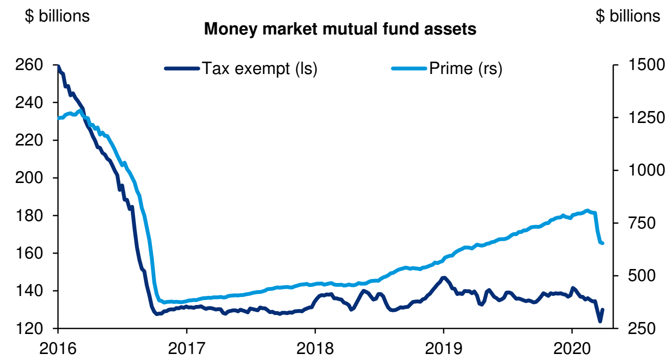
The potential usage for this facility will depend mostly on the extent of further exits from prime money funds. Since the Fed will be able to buy newly issued CP directly from issuers through the CPFF, which we discuss next, there may be less liquidation from prime funds given diminished roll-over risk. That said, a reasonable estimate for how much further selling may be possible from prime money funds in another sharp risk-off scenario could be the post-money market reform 2016 low of around $375bn. If that is the case, the Fed would have to absorb a little less than $300bn more of collateral to facilitate such liquidations. Hence, of the $454bn being handed to the Fed, the MMLF may not require much more than $30bn of additional capital.

Figure 6: Money-market mutual fund assets have soared, driven by flows into government funds



Source : Investment Company Institute, Haver Analytics, Deutsche Bank

Figure 7: Investors have exited Prime and Tax exempt money funds



Source : Investment Company Institute, Haver Analytics, Deutsche Bank

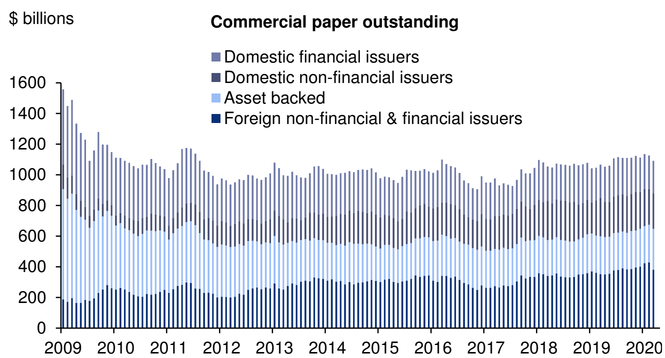
Commercial Paper Funding Facility (CPFF)

The CPFF complements the MMLF. As the Fed has noted, commercial paper is an important source of short-term funding for large financial and nonfinancial businesses. In particular, the asset-backed commercial paper (ABCP) market is an important source of funding for smaller businesses that do not have direct access to capital markets. Businesses can finance their receivables by selling them to an ABCP program. Municipalities also rely on markets to raise funds to support transportation, housing, and health care. Under the CPFF, the Fed's SPV will purchase certain types of assets from eligible issuers, subject to limitations based on the amount of the issuer's outstanding debt prior to the start of the program. The aim here is to eliminate much of the risk that eligible issuers will not be able to repay investors by rolling over their maturing commercial paper obligations.

The SPV will purchase directly from eligible issuers three-month U.S. dollar-denominated commercial paper at a spread over the three-month overnight index swap (OIS) rate plus 110 basis points. In addition, each issuer must pay a facility fee equal to 10 basis points of the maximum amount of its commercial paper the SPV may own. The scope of eligible CP can found in the Fed's term sheet. There are no restrictions on employee compensation, dividends, or other corporate decisions for those firms that tap this facility.

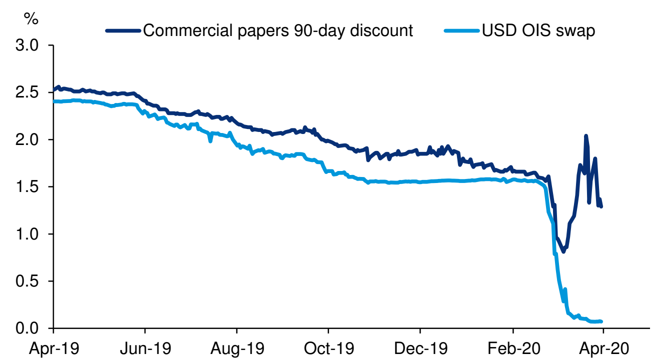
As the Fed has noted, the size of the commercial paper market is approximately $1.1 trillion (Figure 8). However, excluding foreign CP, the potential universe of assets the Fed could purchase would be closer to $700bn. Moreover, as Figure 9 illustrates, a widely-followed benchmark index of top-rated issuers (excluding asset-backed issuers) was recently trading at 118bps, around 111bps over 3m OIS. Thus, in a worst case scenario whereby the Fed is the sole supplier of financing, the CPFF may need around another $30bn to $60bn of capital from the Treasury.

Figure 8: Domestic CP is roughly 70% of the total market



Source : FRB, Haver Analytics, Deutsche Bank

Figure 9: Pricing for 90-day CP is converging toward the Fed's pricing level



Source : Bloomberg Finance LP, Deutsche Bank

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Appendix 1

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