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Fed's $2.3 Trillion Plan:

New and Enhanced Funding Programs

Since the CARES Act was approved by Congress on March 27, all attention has been focused on the timely implementation of the programs authorized by that legislation. A flurry of rulemaking for key aspects of the CARES Act has shifted the focus from identifying high level need to the high volume distribution of funding through both the banking system and directly by the Federal Reserve.

On April 9, the Federal Reserve announced three new lending programs aggregating $1.5 trillion in funding and enhancements to three existing programs aggregating $850 billion that collectively will contribute $2.3 trillion in total funding. These programs are designed to provide liquidity to businesses and investors in corporate debt, ETF securities, asset-backed securities along with states, cities and counties. As shown below in Chart A, this will consist of $544 billion in equity investment by Treasury along with $1.755 trillion in funding supplied by the Federal Reserve:

Chart A – $2.3 Trillion Funding Plan

Program	Treasury Equity	Fed Borrowing	Total Funding	Structure	Targeted User	
PMCCF	$50	$450	$500	SPV	Large Corporate Debt Issuers	*Expanded Programs*
SMCCF	$25	$225	$250	SPV	Bond and Portfolios Investors	
TALF	$10	$90	$100	SPV	Asset Backed Investors	
	$85	$765	$850			
PPPLF	$349	$0	$349	Direct	Small Businesses	*New Programs*
MSNLP/MSELF	$75	$525	$600	SPV	Medium-sized Businesses	
MLF	$35	$465	$500	SPV	States, Counties, Cities	
	$459	$990	$1,449			
Total	$544	$1,755	$2,299			

Dollars in billions
Source: Federal Reserve

Note that of the $454 billion authorized in the CARES Act to be spent on supporting business, $85 billion was allocated to increase the existing PMCCF, SMCCF and TALF programs to increase their total potential funding to $850 billion. For medium sized businesses, $75 billion of equity was allocated by Treasury to capitalize the MSNLP and MSELF programs, which when combined with borrowings from the Fed increased total funding to $600 billion. This leaves almost $300 billion of dry powder from the $454 billion allocated in the CARES Act to deploy to support businesses with other programs.

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The Fed had used its emergency lending authority sparingly under Section 13(3) of the Federal Reserve Act[1] prior to the Great Recession from 2008 – 2009. During that period, it unveiled the Commercial Paper Funding Facility (CPPF), the Primary Dealer Credit Facility (PDCF), the Money Market Mutual Fund Liquidity Facility (MMMLF), the Term Asset-Backed Security Loan Facility (TALF), the Primary Market Corporate Credit Facility (PMCCF), and the Secondary Market Corporate Credit Facility (SMCCF). On April 9, the Fed unveiled three new programs: the Paycheck Protection Program Liquidity Facility (PPPLF), the Municipal Liquidity Facility (MLF) Program, and the Main Street Lending Program, which has two related facilities – the Main Street New Loan Facility (MSNLF) and the Main Street Expanded Loan Facility (MSELF).

These three new programs aim to provide funding to small businesses, states and municipalities, and medium-sized businesses. For the PPPLF, the Fed will provide funding for eligible lenders who pledge PPP loans as collateral. For the Main Street Lending Facilities and the MLF program, a Federal Reserve Bank will lend to special purpose vehicles (SPVs). In the case of the MSNLF and the MSELF, the SPV will purchase a 95% participation in the loans to small and medium-sized businesses. With the MLF program, the SPV will purchase notes directly from eligible issuers secured by all the assets of the SPV. (For a more detailed summary of all announced Monetary Policy actions taken during the COVID-19 Crisis please see Appendix A)

New Programs

Five of the six new and expanded lending programs utilize a special purpose vehicle (SPV) structure whereby the Treasury provides an equity investment to a SPV that is typically levered by 10x to reach total funding capacity. In contrast, due to the high likelihood that a significant amount of the PPP loans will be forgiven rather than repaid, the PPPLF facility is directly funded through Treasury from a specific allocation in the CARES Act. Originating lenders will borrow directly from the Federal Reserve through the PPPLF facility. For a detailed summary and comparison of the underlying terms for loans under the SBA 7(a), PPP, and Main Street programs, please see Appendix B.

<u>Paycheck Protection Program Lending Facility (PPPLF)</u>: The Paycheck Protection Program is a $349 billion program administered by the US Treasury and SBA. It is intended to provide low cost funding to banks and other eligible lenders to enable them to fund PPP loans to qualified small businesses (generally less than 500 employees) they originate under SBA guidelines and with the SBA's 100% guarantee of principal and interest. (please see Borrower Eligibility and PPP guidelines in Appendix B for more details) The PPPLF is a Federal Reserve lending facility designed to provide liquidity to PPP lenders. Under the PPPLF, banks and other eligible lenders will borrow on a non-recourse basis through the Reserve Bank where the lender is located. The loan term will be for up to 2 years at .35% fixed rate secured by a pledge of the PPP loans to qualifying small businesses made by the lender. There are no fees associated with the Fed borrowing facility. No new extension of credit will be made under this program after September 30, 2020. These PPP loans will bear 0% risk-weighting for regulatory capital purposes, and banking organizations borrowing under the PPPLF will be allowed to neutralize the effect of PPP loans financed under the PPPLF on leverage capital rules to the extent of the PPP loans pledged as collateral.[2]

Given how quickly this facility came together and with roughly $350 billion of loans to fund between now and June 30, it is not surprising that there are a few questions to be resolved. On April 10, the Fed hosted a PPPLF call for participants to help address these questions and further explain the PPPLF and other options to fund PPP loans. The fact that 4,000 people dialed into this call illustrates the interest in the program and the large number of questions regarding its implementation. Some key takeaways from that call include:

- The PPPLF program will start the week of April 13.
- PPP collateral must be pledged for borrowing under the PPP lending facility and can also be pledged at the discount window.
- In addition to the 0% risk weighting already provided for PPP loans, such loans pledged under the PPPLF will be neutralized for inclusion in the leverage capital ratio. The term will match term of PPP loans with borrowing rate at .35% fixed.
- PPP loans pledged under the discount window would be subject to standard discount window requirements with a 5% haircut, 90-day maximum borrowing term, and borrowing rate tied to the primary or secondary credit rate depending on the rating and credit of the bank. PPP loans pledged to the discount window will not be neutralized for the leverage ratio.

[1] Please see March 27, 2020 Congressional Research Service report on "Federal Reserve: Emergency Landing" for more details on the Federal Reserve's emergency lending powers to nonbank financial institutions.

[2] Interim Final Capital Rule. Regulatory Capital Rule: Paycheck Protection Program Lending Facility and Paycheck Protection Program Loans. April 9, 2020. Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, and Federal Deposit Insurance Corporation.

- Discount window and PPPLF borrowings can be prepaid at any time but the capital neutralization will be impacted to the extent that the PPP loan is no longer pledged to the Fed.
- PPPLF loans are non-recourse such that at the end of the term, the Fed will have no recourse to the bank for any unpaid amount.
- All PPP lenders are supposed to be granted access for funding under the PPPLF program but the details have not been provided on how that will work for non-banks.

Two questions that we have not seen addressed so far could have significant implications for bank strategy:

- Why would the agencies only neutralize PPP loans pledged to the Fed in the PPPFL facility and not PPP loans funded otherwise with deposits or FHLB advances?
- Assuming the PPP loan is pledged to the PPPLF and the bank can neutralize the PPP loans for leverage ratio purposes, can the banking organization also neutralize the PPP loans for asset size consideration such as the $10 billion threshold and other consideration?

We expect these questions will be addressed at some point through the Fed's Q&A process currently underway.

The example below in Chart B highlights the financial benefits to a bank for lending in the PPP program and pledging the loan to the PPPLF for funding at the Fed. The combination of origination fees and interim net spread income on the loans not forgiven provides an attractive boost to capital and earnings. The resulting increases in ROA and ROE are significant and will likely motivate a high level of participation by potential lenders. (For more details on PPPLF please see link to most recent term sheet) https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200409a6.pdf

Chart B – Pro Forma PPPLF Financial Impact

Illustrative Pro Forma Impact - PPP Lending Funded with PPPLF

Dollars in thousands	Lender as of 3/31/2020	*Step 1* *Write PPP Loans*	*Step 2* *Origination Fee*	*Step 3* *Overhead Costs*	*Step 4* *Stub Period Yield / (Cost)*	*Step 5* *PPP Loan Forgiveness*	Illustrative Lender Pro Forma
Cash & Securities	$250,000		*$7,900*	*($790)*	*$1,284*		$258,394
Net Loans	1,500,000	*250,000*				*(200,000)*	1,550,000
Intangible Assets	25,000						25,000
Other Assets	225,000						225,000
Total Assets	2,000,000	*250,000*	*7,900*	*(790)*	*1,284*	*(200,000)*	2,058,394
Deposits	1,700,000						1,700,000
Borrowings - PPPLF	0	*250,000*				*(200,000)*	50,000
Other Liabilities	75,000						75,000
Total Liabilities	1,775,000	*250,000*				*(200,000)*	1,825,000
Common Equity	225,000		*7,900*	*(790)*	*1,284*		233,394
Total Liabilities & Equity	2,000,000	*250,000*	*7,900*	*(790)*	*1,284*	*(200,000)*	2,058,394

Regulatory Capital Components

Tier 1 Common Capital	200,000	*0*	*7,900*	*(790)*	*1,284*	*0*	208,394
Tier 1 Capital	200,000	*0*	*7,900*	*(790)*	*1,284*	*0*	208,394
Tier 2 Capital	15,000	*0*	*0*	*0*	*0*	*0*	15,000
Total RWA	1,700,000	*0*	*1,580*	*(158)*	*257*	*0*	1,701,679
Assets for Lev. Ratio	1,925,000	*0*	*7,900*	*(790)*	*1,284*	*0*	1,933,394

Capital Ratios

	Lender as of 3/31/2020	Illustrative Lender Pro Forma	Capital Accretion
Tier 1 Leverage Ratio	10.39%	10.78%	39 bps
CET1 Ratio	11.76%	12.25%	48 bps
Tier 1 RBC Ratio	11.76%	12.25%	48 bps
Total RBC Ratio	12.65%	13.13%	48 bps

Projected 2020 Earnings and Return Metrics (GAAP Basis)

Net Interest Income	67,500		*5,267*		*856*		73,623
Net Income	22,000		*5,267*	*(790)*	*856*		27,333
Average Earning Assets	1,800,000	*166,667*	*1,975*	*(527)*	*321*		1,968,436
Average Assets	2,050,000	*166,667*	*1,975*	*(527)*	*321*		2,218,436
Average Equity	230,000		*1,975*	*(527)*	*321*		231,769
Net Interest Margin	3.75%						3.74%
Return on Avg. Assets	1.07%						1.23%
Return on Avg. Equity	9.57%						11.79%

Assumptions:

Step 1: Assumes that the Lender originates 500 PPP loans with an average loan size of $500 thousand; assumes PPP loans are funded through PPPLF borrowings; PPP loans pledged under the PPPLF get 0% risk-weighting and are neutralized for inclusion in the leverage ratio.

Step 2: Assumes that the average origination fee on PPP loans written by the Lender is 4.0%.

Step 3: Assumes overhead cost to underwrite, service and process forgiveness of PPP loans is approximately 0.40% of the PPP loan balance.

Step 4: Assumes the average duration of PPP loans prior to forgiveness is 1.00 years; PPP loans have a yield of 1.00% and PPPLF borrowings have a cost of 0.35%.

Step 5: Assumes 80% of the PPP loan balance is eligible for forgiveness.

Projected 2020 Net Income: Assumes PPP loan origination fees are recorded as net interest income and earned over life of PPP loans with 8 months of fees being earned in 2020; includes 100% of overhead costs; assumes stub period yield / (cost) is earned over life of PPP loans with 8 months being earned in 2020.

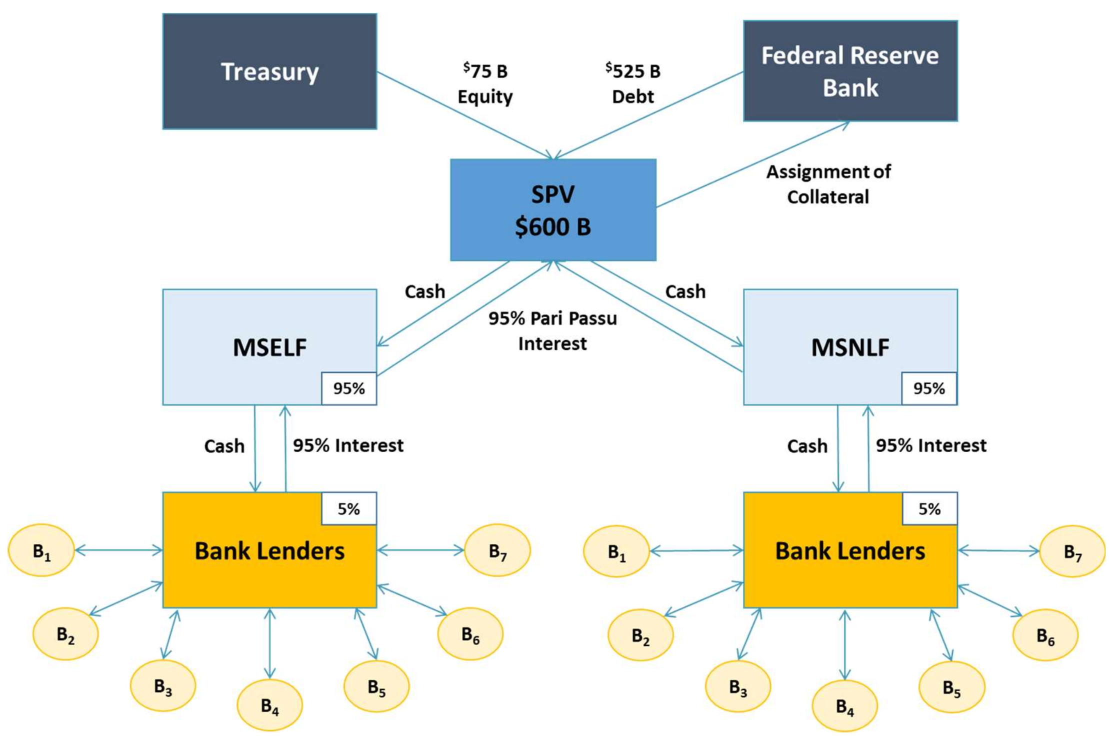
ROAA Calculation: Assumes PPP loans balance is included in average assets for 8 months of the year.

ROAE Calculation: Assumes origination fee and overhead costs are included in average equity for 8 months of the year; assumes net interest income impact is earned over an 8-month period.

Main Street Lending Program: This $600 billion program is intended to provide liquidity to U.S. insured depository institutions, bank holding companies, and thrift holding companies (collectively referred to as Eligible Lenders) so that they can provide funding to mid-sized businesses. The Eligible Lenders will each be responsible for originating eligible loans (Eligible Loans) to eligible borrowers (Eligible Borrowers) that will be sold to a single common special purpose vehicle (SPV) funded by a $75 billion equity commitment from the U.S. Treasury and $525 billion in funding from the Federal Reserve Bank (Reserve Bank). The originating Eligible Lender will retain a 5% participation in each loan sold while the SPV will own a 95% interest that it will purchase at par value. The Eligible Lender and the SPV will share risk on a pari passu basis. As such, the Eligible Lender is strongly incented to originate loans to mid-sized business with due care as consistent with the lender's existing loan policies and procedures. Note that this will be very different from the 100% guarantee that eligible lenders are provided under the PPP as long as SBA PPP paperwork is properly submitted.

The funding structure for the Main Street Lending Program will also vary significantly from the PPPLF. As illustrated below in Chart C, the Treasury will contribute $75 billion of equity with the Reserve Bank contributing $525 billion of debt for total available funding of $600 billion. The SPV will be collateralized by a pledge of the loans but the Eligible Lender will only be at risk for its 5% participation in retained risk. The Eligible Lender will be responsible for originating, underwriting and servicing the loans from borrowers described below as B1- B7.

Chart C - Main Street SPV Structure (MSNLF and MSELF)



There are two different types of credit facilities that will be made available under the Main Street Lending Program: the Main Street New Loan Facility (MSNLF) and the Main Street Expanded Loan Facility (MSELF). The requirements for Eligible Borrowers of loans sold to both facilities are the same. These include businesses with up to 10,000 employees or up to $2.5 billion in 2019 annual revenue. Eligible borrowers must also be a U.S.-based business or business with significant operations in and a majority of its employees in the U.S. It is important to note that Eligible Borrowers can only avail themselves of one of the MSNLF, MSELF or the Primary Market Credit Facility (PMCC) facilities.

There are many common characteristics of Eligible Loans under both facilities, including:

- Term: 4 years with amortization of principal and interest deferred for one year
- Rate: SOFR + 250 to 400 basis points

- Loan Origination/Upsizing Fee: 100 basis points on the principal amount of the loan paid by the Eligible Borrower to the Eligible Lender
- Servicing Fee: 25 basis points per year paid to the Eligible Lender by the SPV on the 95% principal amount of participation in the loan purchased by the SPV
- Prepayment: permitted without penalty
- Facility Termination: the SPV will cease to buy participations on September 30, 2020 unless extended by the Fed and Treasury Department but will continue to fund outstanding loans until the assets mature or are sold

But there are important differences in Eligible Loans under these two facilities as highlighted below:

- MSNLF: a maximum loan size of the lesser of $25 million or 4x EBITDA for 2019 and the Eligible Lender is required to pay the SPV a facility fee of 100 basis points for the loan participation amount purchased by the SPV (Eligible Lenders may require Eligible Borrowers to reimburse this fee). MSNLF loans represent new unsecured credit facilities.
- MSELF: a maximum loan size of the lesser of $125 million, 30% of committed but undrawn debt, or 6x EDITDA for 2019. MSELF credit facilities will generally be used to add to existing credit facilities and as such the terms will conform to the existing credit facility including any provisions for collateral, covenants, etc.

Both facilities require that the Eligible Lender and Eligible Borrower make extensive attestations as follows:

- Eligible Lenders: attest that proceeds will not be used to repay or refinance pre-existing loans or lines of credit; will not cancel or reduce any existing lines of credit outstanding to the Eligible Borrower; and certify compliance with conflicts of interest prohibition in Section 4019(b) of the CARES Act.
- Eligible Borrowers: must attest that proceeds will not be used to repay other loans and will commit to not pay other debt (other than mandatory principal payments) of equal or lower priority until the Eligible Loan is repaid in full; attest that it will not cancel or reduce any of its outstanding lines of credit; certify that it requires the financing due to circumstances presented by the COVID-19 pandemic and it will use reasonable best efforts to maintain payroll and employees during the term of the Eligible Loan; attest that it meets the EBITDA leverage requirements; attest that it will follow the compensation, stock repurchase, and capital distribution restrictions under Section 4003(c)(3)(A)(ii) of the CARES Act; and certify compliance with the conflicts of interest prohibition in Section 4019(b) of the CARES Act.

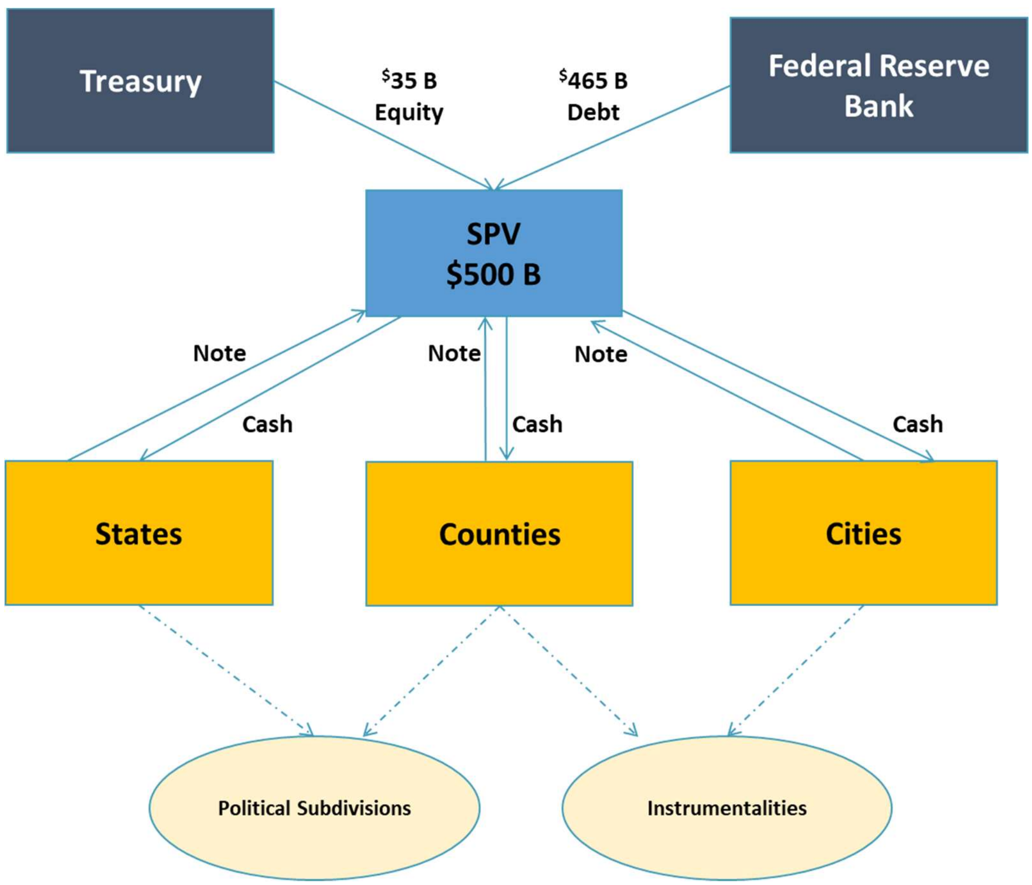
Borrowers under the MSNLF and MSELF must use “reasonable efforts: to maintain payroll and retain employees during the term of the Eligible Loan. The initial term sheets did not adopt the payroll requirements under the “Mid-Size Business Assistance” programs authorized in Section 4003(c) of the CARES Act. However, what is required to meet this standard has not yet been defined so, while we await further guidance, it may be advisable to look to the Mid-Size Business Assistance standard, which generally requires recipients of aid maintain or intend to restore 90% of their workforce.

The Section 4003(c)(3)(A)(ii) restrictions of the CARES Act are very significant. For a period until 12 months after repayment of the Eligible Borrower’s loan, the borrower would be restricted from paying dividends or other distributions on common stock and, if listed, repurchasing an equity security. During this period, the Eligible Borrower must also comply with Section 4004 restrictions on employee compensation that limit the Eligible Borrower from increasing the compensation of any officer or employee whose total compensation exceeds $425,000, or from offering such employee severance pay or other benefits upon termination of employment that exceeds twice the maximum total annual compensation received by that employee until one year after the loan is no longer outstanding. Office or employees making over $3 million last year would also be prohibited from earnings more than $3 million plus 50% of the amount their compensation last year exceed $3 million.

As such, those mid-size businesses that have access to credit facilities on more commercially reasonable terms will be highly incented to pursue those arrangements. It is noteworthy that Treasury does not require ownership interest or equity participation in the Eligible Borrower. (For more details on the MSNLF and MSELF programs please see link to most recent term sheet) https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200409a7.pdf and https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200409a4.pdf

Municipal Liquidity Facility (MLF): This $500 billion program is intended to provide funding to U.S. States and the District of Columbia (the "States"); U.S. cities with a population of more than one million residents (Cities), and counties with a population exceeding two million residents based on the most recent U.S. census data. Similar to the Main Street Lending Program, a Federal Reserve Bank will commit to lend to a SPV on a recourse basis secured by all the assets of the SPV. The SPV will be funded with $35 billion in equity from the Treasury and $465 billion of loans from the Reserve Bank. In total, the SPV will have the capacity to purchase up to $500 billion of Eligible Notes issued by States, Cities and Counties.

Chart D – Municipal Liquidity Facility (MLF)



In contrast to the PPP and Main Street Lending Program, banks or other approved lenders will not lend funds to municipalities. Instead, notes will be created by the States, Cities and Counties (Eligible Issuers) subject to certain eligibility requirements and constraints and then be sold directly to the SPV. The notes that municipalities can issue to the SPV include tax anticipation notes (TANs), tax and revenue anticipation notes (TRANs), bond anticipation notes (BANs) and other short-term notes (Eligible Notes). The eligibility of each note is subject to review by the Federal Reserve and relevant legal opinions and disclosures will be required. In all cases, the use of proceeds is expected to be short-term cash flow management with no issuance of notes with a maturity beyond 24 months from date of issuance.

Eligible Notes that can be purchased by the SPV are limited to an aggregate of 20% of the general revenue from their own sources or utility revenue of the applicable State, City or County based on the 2017 U.S. Census Bureau data. States may request amounts in excess of that limitation for political subdivisions and instrumentalities that are otherwise not eligible for the MLF. Pricing for the Eligible Notes will be based on the Eligible Issuer's rating at the time of purchase with more details to be provided. Each Eligible Issuer that participates in the MLF must pay an origination fee of 10 basis points for the principal amount of issuance with such fee payable from the proceeds from the issuance. (For more details on the MLF please see link to most recent term sheet) https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200409a3.pd

In addition to the funding provided by the MLF, the Fed also expanded securities that could be used as collateral for the Money Market Mutual Fund Liquidity Facility (MMLF) to include municipal variable rate demand notes (VRDNs) and bank certificates of deposit. The Fed also expanded its Commercial Paper Funding Facility (CPFF) to include high-quality, tax-exempt commercial paper (issued by states and municipalities) as eligible securities and reduce the facility's pricing.

Overall, among the new lending programs, both the PPPLF and the Main Street Lending Program utilize banking organizations and approved lenders to originate credit that is then pledged to support borrowings, or sold to an SPV supported by, the Fed. There are significant differences in rates, term and other details as described above. The PPPLF provides financing with a 100% guarantee by the SBA and no recourse to the lender for loans originated pursuant to the SBA's guidelines. The Main Street Lending Programs provide 95% financing for loans originated by Eligible Lenders and sold to the Federal Reserve SPV, but the restrictions on Eligible Borrowers on returns of equity and compensation may limit the attractiveness to those borrowers with limited other financing options. The MLF program provides funding directly to Eligible Issuers placing the burden of origination and administration of Eligible Notes squarely on the Federal Reserve.

Expanded Programs

In addition to the three new lending programs, the Federal Reserve also modified three existing programs to make additional funding available and/or expand the guidelines for usage and available collateral.

Term Asset-Backed Securities Loan Facility (TALF): This $100 billion facility consists of a SPV funded by $10 billion of equity from the Treasury along with $90 billion of borrowings from the Federal Reserve.TALF's scope was expanded on April 9, to add commercial mortgage backed securities (CMS) and ABS where the underlying credit exposure is to equipment leases or leveraged loans. Under the TALF, the Federal Reserve will lend on a non-recourse basis to holders of certain AAA-rated asset-backed securities (ABS) backed by newly and recently originated consumer and small business loans. The loan amount will be based on a discount to fair market value and will be secured at all times by the ABS. All U.S. companies that own Eligible Collateral and maintain an account relationship with a primary dealer are eligible to borrow under the TALF. A U.S. company is a business entity organized under U.S. law or a U.S. Branch or agency of a non-U.S. bank. Eligible ABS collateral must be U.S. dollar denominated and investment grade rated from at least two eligible nationally recognized statistical rating organizations (NRSROs) and without a credit rating below the highest investment grade rating by a NRSRO. All or substantially all of the credit exposures underlying the Eligible ABS collateral must have been originated by a U.S. company and the issuer must be a U.S. company. Eligible ABS must be newly issued on or after March 23, 2020 except that commercial mortgage-backed securities (CMBS) issued after that date will not be eligible.

Credit exposures underlying the ABS must be one of the following: auto loans and leases, student loans, credit card receivables, equipment loans, floorplan loans, insurance premium finance loans, SBA loans, and eligible servicing advance receivables. ABS with interest payments that step up or step down to predetermined levels are not permitted. Single-asset single-borrower CMBS and commercial real estate collateralized loan obligations will not be eligible collateral. Only static CLOs will be eligible collateral. The maturity for all advances will be three years but the rates will vary based on collateral ranging from 150 basis points over the 30-day average SOFR rate for CLOs to 75 basis points for pool certificates for SBA 7(a) loans. For all other eligible ABS collateral without a government guarantee, the borrowing rate would be 125 basis points over the option-adjusted rate for securities with that weighted average life for that maturity. The SPV will assess an administrative fee of 10 basis points of the loan amount on the settlement date for collateral. Loans made under the TALF are non-recourse to the borrower and will be pre-payable in whole or in part at the option of the borrower (no collateral substitution allowed). No new credit extensions will be made after September 30, 2020 unless extended by the Federal Reserve. (For more details on TALF, please see link to most recent term sheet) https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200409a1.pdf

Primary Market Corporate Credit Facility (PMCCF): The PMCCF serves as a funding backstop for corporate debt issued by Eligible Issuers. On April 9, the scope of PMCCF was expanded with an increase in equity investment from Treasury from $10 billion to $50 billion. This $50 billion in equity along with $450 billion of financing from the Federal Reserve Bank of New York (FRBNY) will provide total funding availability of $500 billion. The PMCCF will purchase qualifying bonds as the sole investor in a bond issuance and purchase portions of syndicated loans or bonds at issuance. All the assets of the SPV will secure the FRBNY's $450 billion loan. Blackrock has been hired by the Fed to administer both the PMCCF and SMCCF. An Eligible Issuer of a bond to be purchased by PMCCF must be rated at least BBB-/Baa3 as of March 22, 2020. The issuer may NOT be an insured depository institution or BHC and may not have received specific support pursuant to the CARES Act or any subsequent federal legislation. The issuer must also satisfy the conflict of interest restrictions of Section 4019 of the CARES Act.

Eligible assets consist of corporate bonds issued by an Eligible Issuer with a maturity of four years or less at the time of purchase. The PMCCF may also purchase portions of syndicated loans or bonds at issuance that, at the time of purchase by the PMCCF, are issued by an Eligible Issuer and have a maturity of four years or less. PMCCF is limited to purchasing no more than 25% of any loan syndication or bond issuance. Treasury equity can be leveraged 10:1 to purchase bonds or syndicated loans that were investment grade rated at the time of purchase. Other asset purchases by PMCCF are limited to leverage of 7:1. Eligible Issuers can approach PMCCF to refinance outstanding debt 3 months prior to the maturity of such debt. The maximum debt amount that could be refunded would be 130% of the maximum amount outstanding from March 22, 2019 to March 22, 2020 but ratings have to be reaffirmed at BB-/Ba2 or above by each major NRSRO. Collectively, PMCCF and SMCCF cannot purchase more than 1.5% of the combined potential size of PMCCF and SMCCF of $750 billion or $11.25 billion. Pricing for each investment will be issuer-specific subject to market conditions, but in all cases, PMCCF would receive a facility fee of 100 basis points on the amount of its investment in addition to any other pricing received by other members of the syndicate. The PMCCF will stop making purchases of Eligible Assets no later than September 30, 2020 unless extended by the Federal Reserve. (For more details on PMCCF, please see link to most recent term sheet) https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200409a5.pdf

Secondary Market Corporate Credit Facility (PMCCF): The SMCCF is focused on providing secondary market liquidity to Eligible Sellers of individual corporate bonds and ETFs that have a remaining maturity of five years or less.The SMCCF received an increase in equity investment from Treasury from $10 billion to $25 billion on April 9. This $25 billion in equity along with $225 billion of financing from the Federal Reserve Bank of New York (FRBNY) will provide total funding availability of $250 billion. An Eligible Issuer of a bond to be purchased by SMCCF must be rated at least BBB-/Baa3 as of March 22, 2020. The issuer may not be an insured depository institution or BHC and may not have received specific support pursuant to the CARES Act or any subsequent federal legislation. The issuer must also satisfy the conflict of interest restrictions of Section 4019 of the CARES Act. An Eligible Seller is a business that is organized or created in the U.S. under U.S. law, has a majority of U.S.-based employees, and complies with the conflict of interest requirements previously referenced.

An Eligible ETF asset is one that has a preponderance of U.S. investment grade corporate bonds with the remainder having a primary investment objective of exposure to U.S. high yield corporate bonds. The SMCCF will avoid purchasing shares of eligible ETFs when they trade at prices that materially exceed estimated net asset value of the underlying portfolio. SMCCF is limited to purchasing no more than 10% of the issuer's maximum bond outstanding on any day between March 22, 2019 and March 22, 2020. The SMCCF will not own more than 20% of any ETF's outstanding shares. Treasury equity can be leveraged 10:1 to purchase investment grade rated corporate bonds or ETFs whose primary investment objective is exposure to investment grade corporate bonds. Below investment grade corporate bond purchases by SMCCF are limited to leverage of 7:1 while other purchases may be potentially limited down to 3:1. PMCCF and SMCCF cannot purchase more than 1.5% of the combined potential size of PMCCF and SMCCF of $750 billion or $11.25 billion. The SMCCF will stop making purchases of Eligible Assets no later than September 30, 2020 unless extended by the Federal Reserve. (For more details on SMCCF please see insert link to most recent term sheet) https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200323b2.pd

Summary

Following the rush to pass the CARES Act on March 27, the focus of policy makers has shifted to implementation with an emphasis on supplying liquidity to businesses, states, cities, and counties, as well as corporate bond and ETF investors and ABS investors. The PPP program has made much progress with a torrent of originations almost overwhelming the SBA's system. In order for banks and other lenders to fund the expected volume of $349 billion, lenders needed a quick source of funding that would not negatively affect capital ratios as balance sheets expand to accommodate the bulge in loans. In a novel solution, the policy makers created the PPPLF to provide 100%, non-recourse financing to the PPP lenders. To address concerns about balance sheet growth and pressure on capital ratios, the regulatory agencies agreed to 0% risk weighting on PPP loans and neutralization of the exposure for leverage ratio calculation purposes. There are several open issues on the capital impact of PPP loans. First, are PPP loans that are not pledged to the PPPLF but instead funded with deposits or borrowings also neutralized for the leverage ratio? Second, are PPP loans that are neutralized for the leverage ratio included on certain asset size limits such as for FDIC insurance and the $10 billion threshold among others?

For medium-sized businesses, the Main Street Lending Program, through its MSNLF and MSELF alternatives, offers a robust framework to provide liquidity and funding for new loans or increases in current credit facilities. There are many distinct differences between the PPP program and the Main Street Lending Program. The PPP program is more of a loan forgiveness program structured around the SBA guidelines. Loans originated by banks in the Main Street Lending Program are underwritten based on the originating bank's credit standards reinforced by a 5% *pari passu* retained interest with the SPV buying such assets. The Main Street Lending Program come with the numerous requirements for attestation and limits of dividends, buybacks and compensation that would likely motivate main street business borrowers to instead utilize commercially available financing if possible.

For larger businesses seeking funding through the corporate bond or the syndicated loan market, the PMCCF provides assurance of access to funding as long as credit does not deteriorate below BB-/Ba3. By bolstering the combined size of the PMCCF and SMCCF to $750 billion, the Federal Reserve has provided significant firepower to address any large corporate liquidity needs. With $100 billion for TALF, the Fed has covered the full range of direct funding needs for business and related funding needs for consumers. Investors and issuers utilizing these facilities do not face the requirements for attestation and limits on dividends, buybacks and compensation otherwise faced by the main street borrowers.

While short-term municipal financing has been provided through the money market and commercial paper credit facilities, the COVID-19 crisis has placed unprecedented stress on states, cities and counties. These entities did not have their own framework for funding to cover cash flow needs during the COVID-19 pandemic. The MLF will provide $500 billion in funding with constraints on concentration and use of proceeds. State and local governments will be particularly hard hit with limited tax receipts and much demand for services. This facility will quickly play an important role in providing liquidity to state and local governments while waiting for tax receipts later this year.

In addition to these three new funding facilities, the Fed also bolstered the funding amounts to $750 billion for PMCC, SMCC, and expanded acceptable collateral for TALF to include CMBS, leases and leveraged loans. Taken together the PPPLF, Main Street Lending Program, MLF, PMCC, SMCC and TALF will bring an additional $2.3 trillion in funding to facilitate economic recovery by small, medium and large business from this COVID-19 crisis. While much has been done, there is still dry powder left for more support and we expect to see this deployed soon with funding for mortgage servicing, additional small business PPP loans, and potentially infrastructure investment among others. *It is important to note that the guidance provided in this note is based on information as of April 9 and the funding programs referenced above are subject to public comment on or before April 16. We have provided links to the relevant websites to access the most recent updates as available.*

APPENDIX A

Summary of Announced Monetary Policy Options from the Federal Reserve and U.S. Treasury

3/12/2020	Repo Operations	One month or three months	Set based on dealers' bids, subject to a minimum bid rate	All Banks With Eligible Collateral	Collateral eligible for Open Market Operations (OMO), i.e U.S. Treasuries, fully-guaranteed Agency securities, and GSE securities	$500 B for 3-month Repo $500 B for 1-month Repo	FRBNY boosted volume of repos and signaled up to $1.5 trillion available.
3/15/2020	Fed Funds Rate	N/A	0 to 0.25%	Central Banks		0 to 0.25%	FOMC cut the target rate.
3/15/2020	Bond Buying	N/A	N/A	Central Banks		No limit to QM	FOMC committed to unlimited bond buying of Treasuries and MBS in the amounts needed to support smooth market functioning and effective transmission of monetary policy.
3/15/2020	Swap Lines	Up to 84 days	OIS + 25 bps	14 non-U.S. central banks in major economies	Foreign currency of each counterparty	$30 B of swap lines	Established U.S. dollar currency swap lines with 14 non-U.S. central banks.
3/15/2020	Discount Window	Up to 90 days	Primary credit: 25bps Secondary credit: 75 bps Seasonal credit: 120 bps	Primary Dealers of the New York Fed	List of eligible collateral, subject to haircuts, set forth in the Margins and Collateral Guidelines	Lowered primary credit borrowing rate to 25 bps	Fed, FDIC, and OCC encouraged discount window borrowing.
3/15/2020	Reserve Requirements	N/A	N/A			Reserve requirement dropped to 0%	Reserve requirement cut to 0% freeing up funds as % total deposits to be left in account at the Fed.
3/15/2020	Capital and Liquidity Buffers	N/A	N/A	Primary Dealers of the New York Fed		Lowered primary credit borrowing rate to 25 bps	Fed, FDIC, and OCC issued statement encouraging banks to use capital and liquidity buffers to respond to crisis. Interim final rule change allows more gradual phase in of restrictions on distributions.
3/17/2020	CPPF Commercial Paper Funding Facility	Up to 90 Days	3-month OIS + 110 bps for A1/P1/F1-rated collateral 3-month OIS + 200 bps for A2/P2/F2 rated collateral	Central Banks	3-month CP (incl. tax-exempt CP) rated A1/P1/F1 by an NRSRO A one-time sale of A2/P2/F2-rated collateral is permitted in the event of a ratings downgrade	$10 B to support up to $100 B in funding	SPV buys CP from U.S. issuers including financial and commercial companies and munis.
3/17/2020	PDCF Primary Dealer Credit Facility	Up to 90 days	Primary credit rate	Central Banks	Wide range, many types of investment-grade debt and equities	$10 B to support Up to $100 B in funding	Loans to primary dealers secured by a broad range of eligible collateral.
3/18/2020	MMMLF Money Market Mutual Fund Liquidity Facility	Equal to maturity of collateral pledged, must be <12 mos	Primary rate for OMO-eligible Primary + 25bps for munis Primary + 100bps for other collateral	Eligible Borrowers: U.S. banks/thrifts, U.S. BHCs, U.S. branches and agencies of FBOs; Eligible MMFs: prime and municipal MMFs	OMO-eligible securities; ABCP; certain repo receivables; short-term munis (including VRDNs); CDs	$10 B	Non-recourse loans to U.S. banks and thrifts, U.S. BHCs, U.S. branches and agencies of FBOs, eligible money market funds and muni MMFs.
3/23/2020	TALF Term Asset-Backed Security Loan	Three years	2Y OIS rate +125 bps for <2Y ABS without government guarantee; 3Y OIS rate + 125 bps for >=2Y ABS without government guarantee	Primary Dealers of the New York Fed	Certain USD cash ABS issued on/after March 23, rated AAA by an NRSRO Underlying assets limited to specified non-mortgage exposures; must be newly originated by a U.S. company, no ABS	$10 B to support up to $100 B of financing	SPV makes loans secured by certain AAA-rated ABS without recourse to the borrower, subject to haircuts. FRBNY lends to SPV with recourse.

Date	Program	Term	Rate	Eligible Borrowers	Eligible Collateral	Action/Amt.	Description
3/23/2020	PMCCF Primary Market Corporate Credit Facility	Up to 4 years, callable	Rate "informed by market conditions" PIK bonds available at Board discretion 100 bps commitment fee	U.S. businesses with material operations in the U.S., excluding those that receive direct federal assistance by legislation	Corporate bonds of eligible issuers rated BBB- or better by a major NRSRO	$50 B to support up to $450 B in funding from the Fed for total of $500 B	SPV buys corporate bonds directly from eligible issuers in the primary market and provides loans to eiligible issuers. FRBNY lends to SPV with recourse.
3/23/2020	SMCCF Secondary Market Corporate Credit Facility	Up to five years for corporate bonds	Purchased at fair market value on secondary market	Primary Dealers of the New York Fed	Corporate bonds of eligible issuers rated BBB- or better by a major NRSRO, capped at 10% of issuer's TTM maximum bond float; U.S.-listed ETFs (US, IG, corporate), capped at 20% of assets of ETF	$25 B to support up to $225 B in funding from the Fed for total of $500 B	SPV buys corporate debt of eilgible issuers on the secondary market. FRBNY lends to the SPV with recourse.
4/9/2020	Municipal Liquidity Facility	Up to 24 months	Based on Eligible Issuer's rating at the time of purchase	State, City or County; only one issuer per State, City or County is eligible	Capped at 20% of the general revenue from own sources and utility revenue of the applicable State, City or County government for fiscal year 2017	$35 B to support up to $465 B in funding from the Fed for total of $500 B	Supports lending to U.S. states and the District of Coloumbia, U.S. cities with a population exceeding one million residents, and U.S. counties with a population exceeding two million residents. Fed will commit to lend to a SPV on a recourse basis.
4/9/2020	MSNLF Main Street New Loan Facility	4 years	Adjustable rate of SOFR + 250-400 bps	Businesses with up to 10,000 employees or up to $2.5 billion in 2019 annual revenues; business must be created or organized in the U.S.	Minimum loan size of $1 million; maximum loan size that is lesser of (i) $25 million or (ii) an amount that, when added to the Eligible Borrower's existing outstanding and committed but undrawn debt, does not exceed 4 times EBITDA	$75 B; combined with Main Street Expanded Loan Facility together with MSELF to total $600 B with $525 B in funding from the Fed	Intended to facilitate lending to small and medium-sized businesses. Fed will commit to lend to a single SPV on a recourse basis. The SPV will purchase 95% participations and Eligible Lenders would retain 5% of each Eligible Loan.
4/9/2020	MSELF Main Street Expanded Loan Facility	4 years	Adjustable rate of SOFR + 250-400 bps	Businesses with up to 10,000 employees or up to $2.5 billion in 2019 annual revenues; business must be created or organized in the U.S.	Minimum loan size of $1 million; maximum loan size that is lesser of (i) $150 million, (ii) 30% of the Eligible Borrower's existing outstanding and committed but undrawn bank debt, or (iii) an amount that, when added to the Eligible Borrower's existing outstanding and committed but undrawn debt, does not exceed 6 times the Eligible Borrower's EBITDA	$75 B; combined with Main Street New Loan Facility together with MSNLF to total $600 B with $525 B in funding from the Fed	Intended to facilitate lending to small and medium-sized businesses. Fed will commit to lend to a single SPV on a recourse basis. The SPV will purchase 95% participations in the upsized tranche and Eligible Lenders would retain 5% of the upsized tranche of each Eligible Loan.
4/9/2020	Paycheck Protection Program Lending Facility	Equal to the maturity date of the PPP loan pledged to secure the extension of credit	35 bps	While depository institutions will be operationally first, all PPP lenders will ultimately be able to borrow under this Facility	Only PPP loans guaranteed by the Small Business Administration are eligible to serve as collateral	Up to $349 B in equity from Treasury; Extend credit to eligible financial institutions that originate PPP loans, taking loans as collateral at face value	Intended to facilitate lending by eligible borrowers to small businesses. The Fed will lend to eligible borrowers on a non-recourse basis, taking PPP Loans as collateral.

APPENDIX B

Summary Comparison of SBA 7(a), PPP and "Main Street" Loans

	7(a)	PPP	Main Street
Maximum Loan Amount:	$5m	$10m	*Lessor of*: MSNLF (i) $25m or (ii) 4x Pro Forma Debt to 2019 EBITDA MSELF (i) $50m; (ii) 30% of existing committed and undrawn debt; or (iii) 6x Pro Forma Debt to 2019 EBITDA
Minimum Loan Amount:	None	$1,000	$1m
Term:	Typically 25 years, but may be up to 30 years	2 years	4 years
Interest Rate:	Negotiated up to: 6.00% + 0-200bp spread for loans < $250,000 and 5.00% for loans ≥ $250,000	1.00%[1]	SOFR + 250-400 bp
Origination Fee Paid to Lender:	None	Paid by the SBA: 5% for loans ≤$350,000 3% for loans $350,000 - $2m 1% for loans ≥$2m	Paid by the Borrower: 100 bp
Servicing Fee Paid to Lender:	1.00%	None[2]	25 bp (paid by the SPV upon purchase of the 95% participation)
SBA Guarantee:	85% for loans ≤ $150k; 75% for loans > $150k	100%	None, but 95% of the principal amount will be purchased by the MSNLF or MSELF SPV
Forgiveness Amount:	None	*Up to* 100% if: (i) at least 75% used for approved payroll expenses by June 30th; and (ii) employee; and compensation levels maintained	None

Deferral Period:	None	6 months Interest accrues during this period but no payment is required[3]	12 months As negotiated, except that principal and interest deferred for one year
SBA Payment of Principal & Interest to Lender:	*COVID-19 CHANGE:* SBA will automatically pay the principal, interest, and fees of current 7(a), 504, and microloans for a period of six months. SBA will also automatically pay the principal, interest, and fees of new 7(a), 504, and microloans issued prior to September 27, 2020.	Pursuant to SBA Guarantee & SBA Loan Purchase Only	None
Borrower Repayment Terms:	Monthly, amortized principal and interest over term of loan	Monthly, amortized principal and interest over 18 months from the end of the 6 month deferral period to maturity OPTION Interest only	As negotiated
Guarantee Fee Paid to SBA:	Initial; Ongoing; and Secondary market sale	None	N/A
Secondary Market Sales[4]:	Guaranteed & Unguaranteed portions may be sold; Sales of whole loans packaged into pooled securities by pool assemblers permitted.	After fully disbursed; At a discount or premium; and Without payment of a guaranty fee to the SBA	95% of the principal amount made prior to 9/30/20 of eligible loans will be purchased by the Fed SPV facility
SBA / Fed SPV Loan Purchase:	SBA Only to extent guaranteed portion packaged by a pool assembler and sold as a guaranteed pool, then the SBA purchases the guaranteed portion of the loan out of the pool. If the guaranteed portion not sold into a pool, then the SBA pays out on the guarantee similar to an insurance claim – the lender is responsible for workouts/recoveries and the SBA will make them whole, net of what they recover	SBA At Lender request No earlier than end of 7 weeks into covered period Amount = Expected Forgiveness Amount. *Note, this may not equal the entire guaranteed amount if borrower has not met payroll and employee retention/compensation requirements.* SBA has + 15 days from receipt of all documentation to make payment	Fed SPV MSNLF 95% of principal amount made prior to 9/30/20 MSELF 95% of the increase in debt issued after 4/8/20 and before 9/30/20

Collateral:	Loans ≤ $350,000: at least first lien on assets financed with loan proceeds and all fixed assets including real estate. RE collateral not required when the equity is less than 25% of the fair market value and can be limited to the loan amount. Loans > $350,000: maximum extent possible up to the loan amount. If business fixed assets do not "fully secure" the loan, may include trading assets (using 10% of current book value for the calculation), and must take available equity in the personal real estate (residential and investment) of the principals.	None No personal guarantees	As negotiated MSNLF Unsecured MSELF Any collateral pledged by Borrower will be used to secure the SPV's participation
Borrower Creditworthiness:	SBA Lending Criteria 120.15(SBA 120.101 Credit Elsewhere Test	120.150 N/A Eg., ATR (ability to repay) analysis NOT required Credit Available Elsewhere Test NOT required	Lender should underwrite consistent with similar loans not participated under the MSLF
Borrower Eligibility:	For-profit "small business" concerns	Expanded to include all businesses with < 500 employees, certain food delivery businesses with more than 500 employees, and non-profits. Affiliation standards are waived for small businesses: 1. In certain hotel and food services industries; 2. Franchises in the SBA's Franchise Directory; and 3. Receiving financial assistance from small business investment companies licensed by the SBA Historically *in*eligible businesses, such as lending institutions, life insurance companies, gambling businesses) are NOT eligible.	≤ 10,000 employees OR ≤ $2.5b 2019 revenue US based, with significant US operations and majority employees US based CAN also be a PPP borrower Can NOT be a PMCCF borrower or a borrower under both MSLF facilities

Lender Eligibility:	SBA Approved Lenders Only	*Automatically Eligible:* (i) depository institutions; (ii) farm credit system institution with BSA program meeting depository institution standards; (iii) certain other financing providers that originate, maintain, and services business loans or other commercial financial receivables and participation interests if have formalized compliance program meeting BSA requirements. *Ineligible lenders:* (i) designated Troubled Condition by their primary federal regulator or (ii) subject to formal enforcement action regarding unsafe or unsound lending practices	US depository institutions, bank holding companies and savings and loan holding companies
Use of Proceeds Restrictions	None	*Forgiveness Amount* Requires Borrower use at least 75% of principal for "payroll." Remaining 25% can be used for defined mortgage interest, rent, utilities expense.	Borrower MUST: use "reasonable efforts[5]" to maintain payroll. Lender MUST: maintain existing LOCs to Borrower Borrower must NOT: (i) refi or repay existing debt other than mandatory principal payments;

			(ii) exceed compensation limits; and *For 12 months after the loan is outstanding:* (iv) buyback stock if a public company; or (v) make capital distributions.
Required Forms:	SBA Form 1919 and SBA Form 1920	<u>*Electronic Submissions:*</u> (i) SBA Form 2483 Paycheck Protection Program Application Form – include payroll documentation. (ii) SBA Form 2484 Paycheck Protection Program Lender's Application for 7(a) Loan Guaranty electronically Must also maintain the forms and supporting documentation in lender files.	TBD

1. Note that the CARES Act set the maximum interest rate at 4.00%. Pursuant to the SBA's Interim Final Rule, the maximum interest rate was lowered to 1.00% but the SBA could revisit before the rule is finalized in 30 days.
2. If the lender sells the loan and then services it, they will need to back out a servicing fee.
3. The CARES Act provided for deferrals of up to 12 months. The SBA's Interim Final Rule limited this to 6 months.
4. As a practical matter, it is unlikely a secondary market will develop for PPP loans given the non-recourse term financing provided by the Federal Reserve through the PPP Lending Facility, coupled with the capital neutrality for PPP loans pledged as collateral under the PPPLF. [THIS IS OBVIUOSLY A REALLY IMPORTANT POINT NOT TO BE BURIED IN A FOOTNOTE. I ASSUME IT WILL BE DISCUSSED EARLIER IN THE NOTE.]
5. "Reasonable effort" to maintain payroll has not yet been defined and, although the MSNLF and MSELF are authorized by the Federal Reserve actions under Section 4003(c)(3) of the Cares Act, it may be advisable to look to the payroll requirements under other programs authorized in Section 4003(c), which generally require recipients of aid maintain or intend to restore 90% of their workforce.

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