

TREASURY AND FED LENDING PROGRAMS:  
AN ASSESSMENT AND CALL FOR CONTINUED  
SUPPORT FOR SMES



DECEMBER 2020

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**Treasury and Fed Lending Programs:  
An Assessment and Call for  
Continued Support for SMEs**

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## Executive Summary

This Report presents a data-based overview and analysis of key U.S. government interventions deployed in response to the COVID-19 pandemic to stabilize financial markets and support the provision of credit to the real economy.

We find that the U.S. Treasury Department and Federal Reserve lending facilities were successful at stabilizing the U.S. financial system and capital markets. However, the Main Street Lending Program (“**MSLP**”) was unsuccessful at addressing the funding needs of small and medium-sized U.S. businesses (“**SMEs**”). And although we commend the recent enactment of a new \$284.45 billion Paycheck Protection Program (“**PPP**”) for SMEs, we believe that U.S. SMEs without access to the new PPP may need additional government support.

Our report includes three parts. Part I provides an overview and analysis of U.S. Treasury and Federal Reserve programs to support the financial system, including primary dealers, money markets, securitized debt and large U.S. companies. Part II provides an overview and assessment of U.S. Treasury and Federal Reserve programs to support U.S. SMEs. Part III briefly describes the state of the U.S. Treasury and Federal Reserve lending facilities, the new Coronavirus relief legislation, ongoing economic challenges and sets forth our recommendation.

Part I describes six emergency lending facilities established by the Federal Reserve to support the financial system, with approval from the Secretary of the Treasury: (1) the Primary Dealer Credit Facility; (2) the Commercial Paper Funding Facility; (3) the Money Market Mutual Fund Liquidity Facility; (4) the Term Asset-Backed Securities Loan Facility; (5) the Primary Market Corporate Credit Facility; and (6) the Secondary Market Corporate Credit Facility. It summarizes the structure of these six facilities and sets forth data on the markets that these facilities target, the facilities’ usage, and their impact on markets. We find that these programs have thus far successfully addressed the severe funding strains experienced in March 2020 and have stabilized these markets.

**Figure 1** on the next page provides key details of these facilities, including their: announcement date, launch date, current and maximum usage, maximum program size and backing from the U.S. Treasury. Section 13(3) of the Federal Reserve Act, as amended by the Dodd-Frank Act, requires that such facilities be collateralized and approved by the Secretary of the Treasury. In Part I, we explain the collateral required by each facility, including when the necessary collateral protection is provided by the U.S. Treasury Department in the form of loan guarantees or equity investments.

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**Figure 1: U.S. Treasury Department and Federal Reserve 13(3) Facilities  
for the Financial System and Large Companies**

<i>Facility</i>	<i>Announcement date</i>	<i>Launch date (days from announcement to launch)</i>	<i>Current usage* as of December 23 (max usage since operational)</i>	<i>Maximum program size</i>	<i>Treasury support received as of December 23</i>	<i>Treasury support pledged</i>	<i>Backed by CARES Act funds?</i>
Primary Dealer Credit Facility ("PDCF")	March 17th	March 20th (3)	\$0.5 billion (\$33.4 billion)	-	-	-	No
Commercial Paper Funding Facility ("CPFF")	March 17th	April 14th (28)	\$0.0 (\$4.3 billion)	-	\$10 billion**	\$10 billion**	No
Money Market Mutual Fund Liquidity Facility ("MMLF")	March 18th	March 23rd (5)	\$4.2 billion (\$53.2 billion)	-	\$1.5 billion***	\$10 billion***	No
Term Asset-Backed Securities Loan Facility ("TALF")	March 23rd	June 17th (86)	\$3.7 billion (\$3.7 billion)	\$100 billion	\$10 billion**	\$10 billion**	Yes
Primary Market Corporate Credit Facility ("PMCCF")****	March 23rd	June 29th (98)	\$0.0 (no usage)	\$750 billion (combined capacity of PMCCF and SMCCF)	\$37.5 billion**	\$75 billion**	Yes
Secondary Market Corporate Credit Facility ("SMCCF")****	March 23rd	May 12th – ETF purchases (50) June 15 <sup>th</sup> – bond purchases (84)	\$14.2 billion (\$14.2 billion)	\$750 billion (combined capacity of PMCCF and SMCCF)	\$37.5 billion**	\$75 billion**	Yes
Total	-	-	\$22.6 billion (\$86.2 billion)	-	\$59.0 billion	\$105.0 billion	-

\* "Usage" refers to *loans outstanding* for the PDCF, MMLF, TALF; "Usage" refers to *net holdings* for the CPFF, PMCCF, and SMCCF.

\*\* Treasury equity investment from Exchange Stabilization Fund.

\*\*\* Treasury credit protection from Exchange Stabilization Fund.

\*\*\*\* The PMCCF and SMCCF combine to form the Corporate Credit Facility ("CCF").

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In Part II we present data on COVID-19’s impact on SMEs and two government programs established to support these businesses: the PPP and the MSLP. We describe the terms of the PPP and the MSLP, and summarize data on their uptake and impact. We find that SMEs likely need additional financial support. **Figure 2** below provides an overview of the two government programs enacted to support SMEs, including their announcement date, launch date, loans extended, maximum program size and Treasury support received.

**Figure 2: Government Programs Supporting SMEs**

<i>Program</i>	<i>Announcement date</i>	<i>Launch date (days from announcement to launch)</i>	<i>Loans extended as of December 23</i>	<i>Maximum program size</i>	<i>Treasury support received as of December 23</i>	<i>Treasury support pledged</i>	<i>Backed by CARES Act funds?</i>
Paycheck Protection Program ("PPP")	March 27th	April 3rd (7)	\$525 billion (total amount loaned as of expiration of authority to make new loans on August 8)	\$659 billion*	-	-	Yes
Main Street Lending Program ("MSLP")	April 9th	June 15th (67)	\$14.5 billion**	\$600 billion	\$37.5 billion	\$75 billion*	Yes

\* The PPP was originally capped at \$349 billion; another \$310 billion was appropriated on April 24th.  
 \*\* Represents the Fed’s 95% participation in MSLP loans.

In Part III we briefly describe the state of the Treasury and Federal Reserve’s lending facilities and the new Coronavirus relief legislation that generally prevents the CARES Act facilities from making any new loans or purchasing new assets after December 31, 2020.<sup>1</sup> We then describe the ongoing economic impact of COVID-19 and the new PPP established by the Coronavirus relief legislation with an appropriation of \$284.45 billion. However, as the new PPP will not be available to all SMEs, we believe that the Congress or the Federal Reserve and Treasury Department should consider creating a new lending program for SMEs that lack access to the new PPP.

<sup>1</sup> *Consolidated Appropriations Act, 2021*, H.R. 133, 116th Cong., Division N, § 1005 (December 27, 2020), <https://rules.house.gov/sites/democrats.rules.house.gov/files/BILLS-116HR133SA-RCP-116-68.pdf>.

## Part I: Government Programs to Support the Financial System

### *Section 13(3) Facilities Established in March 2020*

In March 2020, the U.S. Treasury Department and Federal Reserve (the “**Fed**”) responded to the COVID-19 pandemic by initiating a series of measures to provide liquidity to the financial system. These interventions include the revival of four emergency lending facilities deployed during the 2008-2010 global financial crisis: (1) the Primary Dealer Credit Facility; (2) the Commercial Paper Funding Facility; (3) the Money Market Mutual Fund Liquidity Facility (similar to 2008’s Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility); and (4) the Term Asset-Backed Securities Loan Facility. They also include the creation of two new facilities to support the provision of credit to large U.S. companies—the Primary Market Corporate Credit Facility and the Secondary Market Corporate Credit Facility.

Each of these six facilities has been established by the Federal Reserve, with the approval of the Secretary of the Treasury, as required by Section 13(3) of the Federal Reserve Act.<sup>2</sup> Certain of these facilities are backed by Treasury funds. Under the Gold Reserve Act, the Secretary of the Treasury has authority over the Exchange Stabilization Fund (the “**ESF**”).<sup>3</sup> The Treasury can backstop Fed facilities by agreeing to cover losses that the facilities incur with ESF funds.<sup>4</sup> The Coronavirus Aid, Relief, and Economic Security Act<sup>5</sup> (the “**CARES Act**”), signed into law on March 27, bolsters the Treasury’s ability to backstop Fed emergency facilities using ESF funds. Prior to the enactment of the CARES Act the ESF had approximately \$93.7 billion in funds that could be used for this purpose.<sup>6</sup> The CARES Act appropriated \$454 billion to the ESF and authorized the Treasury to use these appropriations to provide additional support in the form of loans to and investments in Fed emergency facilities.<sup>7</sup>

We will now describe the six Section 13(3) facilities established by the Federal Reserve in March 2020, along with data on the markets that they target, the facilities’ usage, and their impacts. The facilities backed by CARES Act funds are identified as such.

<sup>2</sup> See, e.g., FEDERAL RESERVE SYSTEM, *Periodic Report: Update on Outstanding Lending Facilities Authorized by the Board under Section 13(3) of the Federal Reserve Act* (Oct. 7, 2020), <https://www.federalreserve.gov/publications/files/pdcf-mmlf-cpff-pmccf-smccf-talf-mlf-ppplf-msnlf-mself-msplf-nonlf-noelf-10-8-20.pdf#page=2>

<sup>3</sup> 31 U.S.C. § 5302. U.S. DEPARTMENT OF TREASURY, *Exchange Stabilization Fund: Statement of Financial Position* (as of Feb. 29, 2020), [https://home.treasury.gov/system/files/206/February\\_FY20\\_Financial\\_Statements.pdf](https://home.treasury.gov/system/files/206/February_FY20_Financial_Statements.pdf). 31 U.S.C. § 5302(b).

<sup>4</sup> Sage Belz, David Wessel, *What is the Exchange Stabilization Fund? And how is it being used in the coronavirus (COVID-19) crisis?*, BROOKINGS (March 24, 2020), <https://www.brookings.edu/blog/up-front/2020/03/24/what-is-the-exchange-stabilization-fund-and-how-is-it-being-used-in-the-coronavirus-covid-19-crisis/>.

<sup>5</sup> PUB. L. 116-136, *Coronavirus Aid, Relief, and Economic Security Act* (March 27, 2020), <https://www.congress.gov/bill/116th-congress/house-bill/748> [hereinafter, the “**CARES Act**”].

<sup>6</sup> U.S. DEPT. OF TREASURY, *Exchange Stabilization Fund: Statement of Financial Position* (as of Feb. 29, 2020), [https://home.treasury.gov/system/files/206/February\\_FY20\\_Financial\\_Statements.pdf](https://home.treasury.gov/system/files/206/February_FY20_Financial_Statements.pdf)

<sup>7</sup> CARES Act, *supra* note 5, at § 4003. Treasury may make up to \$25 billion of the \$500 billion available to passenger air carriers, up to \$4 billion to cargo air carriers, up to \$17 billion to businesses critical to maintaining national security, and the remainder (i.e., the sum of \$454 billion and any of the \$500 billion not used to support those specified industries) available for facilities established by the Fed for the purpose of providing liquidity to the financial system that supports lending to eligible businesses, states, or municipalities.

*Primary Dealer Credit Facility*

The onset of the COVID-19 crisis resulted in significant liquidity pressures on primary dealers and volatility in financial markets, as investors rushed to sell their assets for cash. As **Figure 3** on the next page shows, volatility across markets spiked during the first few weeks of March. On March 2, the Chicago Board Options Exchange (“CBOE”) VIX, a common measure of expected equity market volatility, sat at 33.4, but jumped 49.3 points to an all-time high of 82.7 on March 16. U.S. Treasury markets, typically safe havens during times of uncertainty, also experienced extreme levels of volatility and liquidity pressures. For example, the CBOE’s index measuring volatility in U.S. 10-year Treasuries jumped 9.8 points from 6.6 on March 2 to a record high of 16.4 on March 19.<sup>8</sup> And according to Fed research, primary dealers exhibited a -16.7% decline in their supply of liquidity for U.S. Treasuries in March 2020, while investors’ demand for liquidity increased 25.7%.<sup>9</sup> The extreme dislocations in U.S. Treasury markets in March will be examined in further detail in a subsequent Committee report.

Responding to these widespread market disruptions, the Fed announced that it would re-establish the Primary Dealer Credit Facility (“PDCF”)<sup>10</sup> on March 17. The PDCF is intended to provide funding to primary dealers, which provide liquidity in important financial markets including U.S. Treasury securities, fixed-income securities and equities. Under the PDCF, the Federal Reserve Bank of New York (“FRBNY”) extends low-interest loans to primary dealers for terms of up to 90 days, collateralized by a range of equity securities and investment grade debt securities.<sup>11</sup> The size of the PDCF is not capped, and the facility became operational on March 20. The Treasury did not provide credit support to the PDCF, because PDCF loans are collateralized with securities provided by primary dealers and are made with recourse beyond the pledged collateral to the primary dealers themselves. Of course, Treasury approval was still provided, as it is required by Section 13(3) of the Federal Reserve Act, as amended by the Dodd-Frank Act.

Asset markets impacted by the primary dealer liquidity crunch began to normalize following the establishment of the PDCF. **Figure 3** below shows that volatility in equity and Treasury markets decreased following the announcement of the PDCF and other Fed interventions. The VIX dropped from the March 16 high of 82.7 to 53.5 by March 31, and the U.S. Treasury volatility index dropped from 16.4 on March 19 to 8.35 on March 31. As markets stabilized, PDCF loans outstanding dropped to \$10.3 billion by May 13. Outstanding loans continued to decrease as initial loans matured, and totaled only \$485 million on December 23.<sup>12</sup>

<sup>8</sup> CBOE data accessed through St Louis Fed FRED database. FEDERAL RESERVE BANK OF ST. LOUIS, *CBOE Volatility Index* (last accessed Dec. 15, 2020), <https://fred.stlouisfed.org/graph/?g=wRS0>.

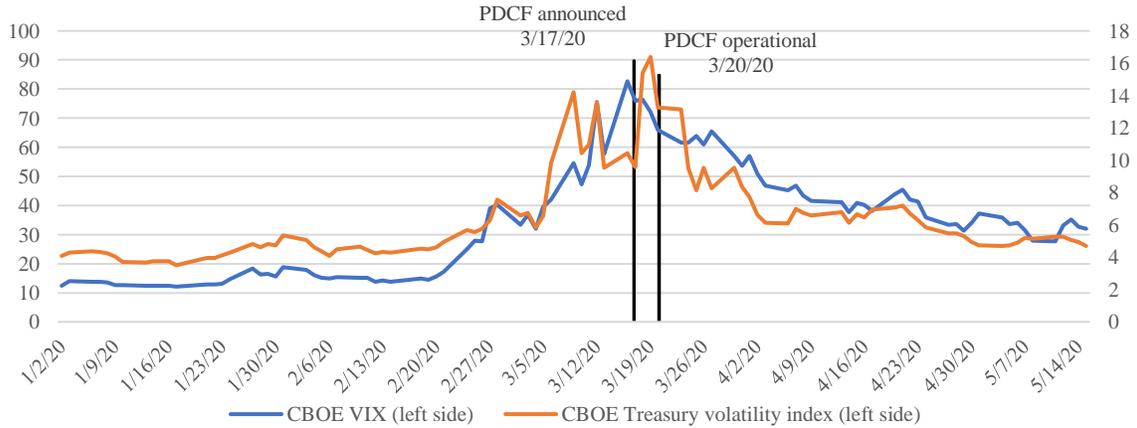
<sup>9</sup> Jonathan Goldberg, *Dealer Inventory Constraints during the COVID-19 Pandemic: Evidence from the Treasury Market and Broader Implications*, FEDERAL RESERVE SYSTEM (July 17, 2020), <https://doi.org/10.17016/2380-7172.2581>.

<sup>10</sup> FEDERAL RESERVE SYSTEM, *Term Sheet for Primary Dealer Credit Facility (PDCF)* (March 17, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200317b1.pdf>

<sup>11</sup> *Id.*; FEDERAL RESERVE SYSTEM, *Federal Reserve announces establishment of a Primary Dealer Credit Facility to support the credit needs of households and businesses* (March 17, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200317b.htm>.

<sup>12</sup> FEDERAL RESERVE SYSTEM, *Federal Reserve Statistical Release for the week ending December 23, 2020* (December 28, 2020), <https://www.federalreserve.gov/releases/h41/current/h41.htm>.

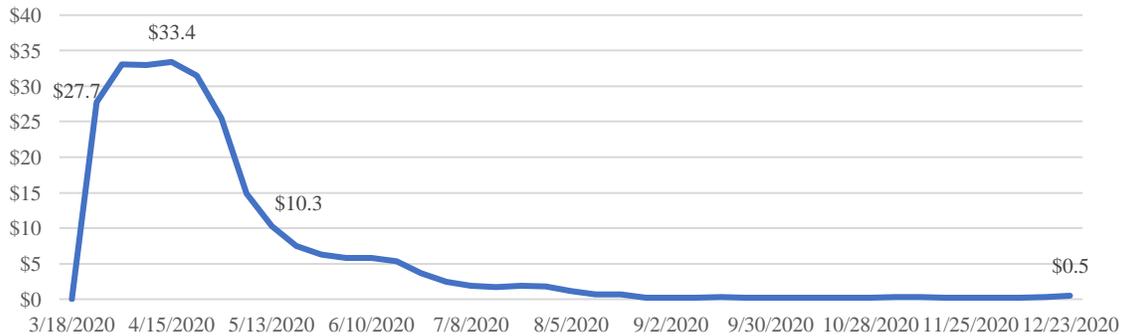
Figure 3: U.S. equity and treasury market volatility, January 1, 2020 to May 15, 2020



Note: CBOE Treasury volatility index discontinued on May 15, 2020.  
 Source: CBOE data accessed through St. Louis FRED database.

As **Figure 4** below displays, utilization of the PDCF was immediate, with primary dealers borrowing \$27.7 billion in the first week of operations. Cumulative outstanding loans reached \$33.4 billion in only a month.<sup>13</sup> According to analysis from New York Fed researchers, the majority of the assets financed in the PDCF have been corporate debt, municipal debt, asset-backed securities, and commercial paper—all asset classes that were significantly impacted by the onset of the COVID-19 crisis.<sup>14</sup>

Figure 4: PDCF total loans outstanding as of December 23, 2020 (\$B)



Source: Fed H.4.1 statistical release.

<sup>13</sup> FEDERAL RESERVE SYSTEM, *Federal Reserve Statistical Release for the week ending December 23, 2020* (December 28, 2020), <https://www.federalreserve.gov/releases/h41/current/h41.htm>.

<sup>14</sup> Antione Martin and Susan McLaughlin, *The Primary Dealer Credit Facility*, FEDERAL RESERVE BANK OF NEW YORK, LIBERTY STREET ECONOMICS (May 2020), <https://libertystreeteconomics.newyorkfed.org/2020/05/the-primary-dealer-credit-facility.html>.

*Commercial Paper Funding Facility*

Commercial paper is a common form of short-term, typically unsecured, debt issued by many financial and non-financial U.S. companies to fund operational needs. At the beginning of March 2020, the total amount of commercial paper outstanding stood at \$1.14 trillion.<sup>15</sup> The \$1.14 trillion comprised 51.2% commercial paper issued by financial companies, 26.7% issued by non-financial companies, and 22.1% asset-backed commercial paper.

The COVID-19 crisis brought on significant stress for this important source of short-term funding. As **Figure 5** on the next page shows, the cost of borrowing in commercial paper markets skyrocketed through the month of March. On February 28, the difference between 90-day financial and non-financial commercial paper borrowing rates and the 3-month U.S. Treasuries was only 20 basis points.<sup>16</sup> As COVID-19 began to take its grip through the first weeks of March, the spread for both began to widen with non-financial topping out at 218 basis points on March 26 and financial touching 253 basis points on March 25. This widening of non-financial and financial commercial paper spreads in late March 2020 nearly matched the global financial crisis highs.<sup>17</sup>

In light of this stress in commercial paper markets, the Fed announced that it would re-establish a Commercial Paper Funding Facility (“CPFF”)<sup>18</sup> on March 17. The CPFF supplies liquidity to commercial paper markets through a special purpose vehicle (“SPV”) that purchases three-month, highly-rated, U.S. dollar-denominated commercial paper from U.S. issuers through CPFF dealers selected by the FRBNY.<sup>19</sup> To finance the SPV’s purchases, the FRBNY lends to the SPV on a recourse basis, secured by the SPV’s assets.<sup>20</sup> The Treasury used ESF funds (in this case, not those appropriated under the CARES Act) to support the CPFF by making a \$10 billion equity investment in the SPV. Such backing from the U.S. Treasury Department is necessary to satisfy the collateral requirement imposed by Section 13(3) of the Federal Reserve Act, as amended by Dodd-Frank, because the commercial paper purchased by the CPFF includes unsecured commercial paper—in the absence of any Treasury backing, the Fed would bear the entire risk of any decrease in the value of the unsecured commercial paper.<sup>21</sup>

The CPFF launched on April 14, almost a month after it was announced. CPFF net holdings quickly reached \$2.7 billion by April 22, and grew to their highest point of \$4.3 billion by May

<sup>15</sup> SIFMA, *US ABCP and CP Outstanding* (Dec. 10, 2020), <https://www.sifma.org/resources/research/us-abcp-and-cp-outstanding/>

<sup>16</sup> FEDERAL RESERVE BANK OF ST. LOUIS, *90-Day AA Financial Commercial Paper Interest Rate, 90-Day AA Non-Financial Commercial Paper Interest Rate, 3-Month Treasury Constant Maturity Rate* (last accessed Dec. 15, 2020), [https://fred.stlouisfed.org/graph/?g=wMMO\\_](https://fred.stlouisfed.org/graph/?g=wMMO_)

<sup>17</sup> *Id.*

<sup>18</sup> FEDERAL RESERVE BANK OF NEW YORK, *FAQs: Commercial Paper Funding Facility* (Nov. 30, 2020), <https://www.newyorkfed.org/markets/commercial-paper-funding-facility/commercial-paper-funding-facility-faq>; FEDERAL RESERVE BANK OF NEW YORK, *Commercial Paper Funding Facility: Program Terms and Conditions* (Nov. 30, 2020), [https://www.newyorkfed.org/markets/commercial-paper-funding-facility/commercial-paper-funding-facility-terms-and-conditions\\_](https://www.newyorkfed.org/markets/commercial-paper-funding-facility/commercial-paper-funding-facility-terms-and-conditions_)

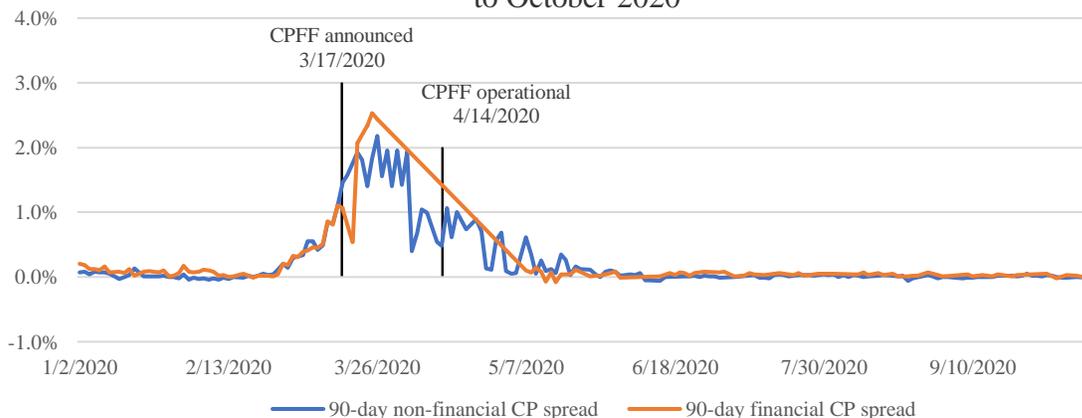
<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> The 2008-era version of the CPFF, also established using the Fed’s Section 13(3) authority, did not have any Treasury backing. However, the Dodd-Frank Act amended Section 13(3) to require the Fed ensure that the security for emergency loans provided under any emergency lending facility “is sufficient to protect taxpayers from losses.” PUB. L. 111-203, *Dodd-Frank Wall Street Reform and Consumer Protection Act*, § 1101 (July 21, 2010), <https://www.congress.gov/bill/111th-congress/house-bill/4173>.

13.<sup>22</sup> Analyzing **Figure 5** below shows that the CPFF, in combination with other Fed facilities, had a dramatic impact on commercial paper markets. As the facility became operational, commercial paper spreads began to normalize, demonstrating enhanced liquidity in these markets. For example, the non-financial commercial paper spread returned to 100 basis points by April 17 and has not yet surpassed this mark as of the beginning of October.

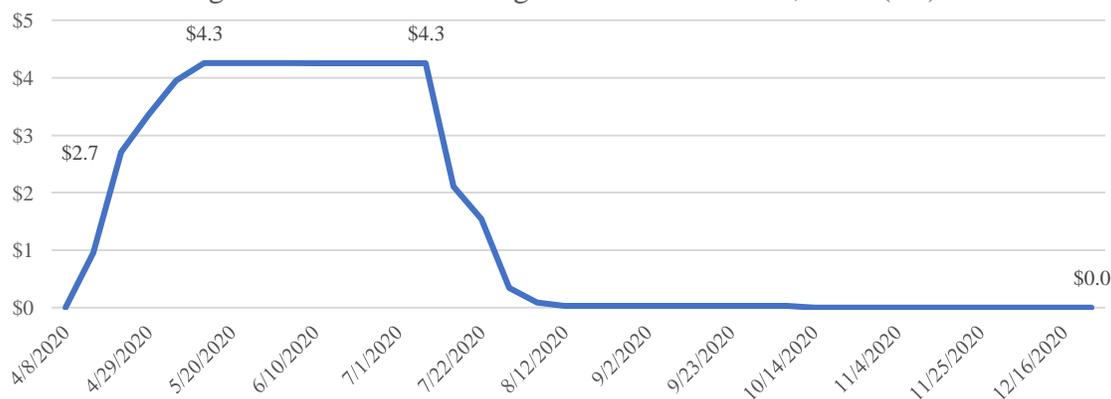
Figure 5: 90-day non-financial and financial CP rate spreads, January to October 2020



Note: 90-day AA non-financial and AA financial CP spreads are calculated as 90-day non-financial and financial CP rate less the 3-month treasury constant maturity rate.  
 Source: Fed commercial paper and 3-month treasury rates accessed through St. Louis FRED database.

**Figure 6** below shows that net holdings of the CPFF remained constant at \$4.3 billion until July 8, then dropped off precipitously as the first round of commercial paper purchased by the facility matured. By October 14, the CPFF’s net holdings had fallen to \$0, where they have remained as of December 23. The successful stabilization of the commercial paper markets helps explain the reduction in CPFF net holdings illustrated in **Figure 6**.<sup>23</sup>

Figure 6: CPFF net holdings as of December 23, 2020 (\$B)



Source: Fed H.4.1 statistical release.

<sup>22</sup> FEDERAL RESERVE SYSTEM, *Federal Reserve Statistical Release for the week ending December 23, 2020* (December 28, 2020), <https://www.federalreserve.gov/releases/h41/current/h41.htm>.

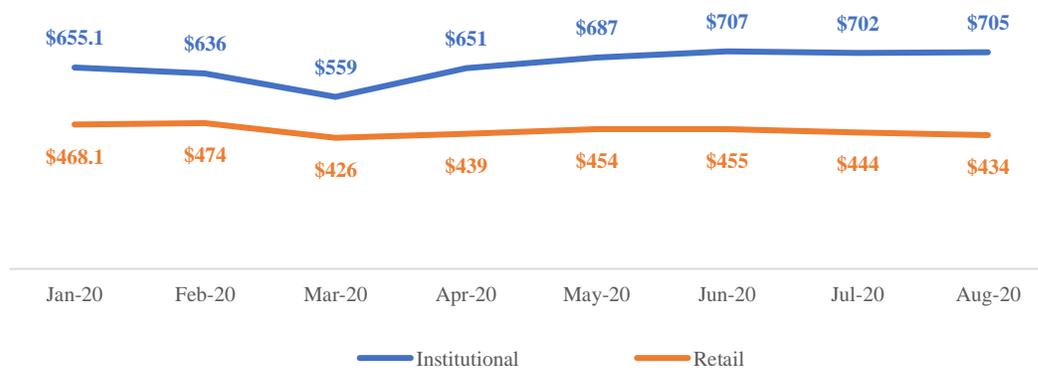
<sup>23</sup> *Id.*

*Money Market Mutual Fund Liquidity Facility*

In mid-March 2020, certain money market funds (“MMFs”) experienced significant outflows as concerns surrounding COVID-19 drove many investors to redeem their MMF shares for cash. These redemptions were especially significant at prime MMFs, a category of MMFs that primarily invest in privately-issued short-term debt securities as opposed to government securities.

At the start of March 2020, prime MMFs had \$1.1 trillion in assets, representing 27% of all MMF assets under management (“AUM”).<sup>24</sup> Prime institutional funds (funds used by institutional investors) represented 57% of all prime MMF AUM at \$636 billion, and retail funds represented the remaining 43% at \$474 billion.<sup>25</sup> At the onset of the crisis, assets in prime institutional MMFs quickly declined by \$66 billion between March 11 and March 18. Assets in prime retail MMFs declined approximately \$20 billion over the same period. Institutional investors pulled an additional \$30 billion, and retail investors another \$23 billion, from prime MMFs over the subsequent week.<sup>26</sup> **Figure 7** below demonstrates the significant decrease in prime money market fund net assets in March 2020.

Figure 7: Monthly prime institutional and retail money market fund net assets (\$B)



Source: SEC Form N-MFP data.

These drastic outflows from prime institutional funds led to substantial decreases in these funds’ net asset values (“NAVs”) and weekly liquid assets (“WLAs,” which measures a fund’s

<sup>24</sup> U.S. SEC. & EXCH. COMM’N. DIVISION OF INVESTMENT MANAGEMENT OFFICE, *Money Market Fund Statistics*(April 13, 2020), <https://www.sec.gov/files/mmf-statistics-2020-03.pdf>.

<sup>25</sup> *Id.*

<sup>26</sup> INVESTMENT COMPANY INSTITUTE, *Weekly Money Market Mutual Fund Assets* (last accessed Dec. 15, 2020), <https://www.ici.org/research/stats/mmf>; Nick Timiraos, *Federal Reserve to Backstop Money-Market Mutual Funds Amid Coronavirus*, THE WALL STREET JOURNAL (March 19, 2020), <https://www.wsj.com/articles/federal-reserve-will-backstop-money-market-mutual-funds-amid-coronavirus-11584588654>.

liquid assets as a portion of all assets).<sup>27</sup> According to Fitch, average prime institutional NAVs dropped from 1.0008 to 0.9991 between March 4 to March 19.<sup>28</sup> Bank of International Settlements (“**BIS**”) analysis of Crane data showed that prime institutional fund WLAs suffered in tandem, with certain funds’ WLAs dropping below the 30% regulatory minimum that was put in place after the 2008 crisis.

To provide MMFs with liquidity to meet redemptions and to stem further outflows, the Fed announced the Money Market Mutual Fund Liquidity Facility (“**MMLF**”)<sup>29</sup> on March 18. The MMLF is structured similarly to the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility that the Fed deployed during the 2008-2010 financial crisis, although the MMLF accepts a broader range of assets.<sup>30</sup> The MMLF is administered by the Federal Reserve Bank of Boston (“**FRBB**”), which makes advances to eligible banks to purchase certain high-quality assets (such as U.S. Treasuries and fully-guaranteed agency securities) from prime money market funds.<sup>31</sup> These assets are pledged to the FRBB as collateral for loans made through the facility.<sup>32</sup> The Treasury is providing \$10 billion of credit protection to the FRBB for the MMLF, using ESF funds it held before the enactment of the CARES Act.<sup>33</sup> As in the case of the CPFF, such backing is necessary to satisfy the collateral requirement imposed by Section 13(3) of the Federal Reserve Act, since lending to banks under the MMLF is non-recourse to the borrower. Therefore, the Fed and not the banks, bears the risk of loss on the pledged collateral, which may primarily itself be unsecured like commercial paper.<sup>34</sup> The MMLF launched on March 23, five days after it was announced.

Uptake of the MMLF was immediate—in just over two weeks after opening, the total amount of loans outstanding under the facility hit a high of \$53.2 billion.<sup>35</sup> The rapid usage of the facility helped reverse the negative trajectory of prime institutional MMFs. As displayed in **Figure 7** on the prior page, prime institutional MMFs began to experience net inflows by mid-April, and ended the month with \$651 billion in assets – a net inflow of \$92 billion from the end of March.<sup>36</sup> NAVs and WLAs recovered soon after the MMLF’s launch. Fitch research shows that institutional

<sup>27</sup> “Weekly liquid assets” is a term defined in US SEC Rule 2a-7 (which governs money market funds) and “liquid assets” include: cash, direct obligations of the US government, certain securities issued by US government instrumentalities with a remaining maturity date of 60 days or less, and securities that mature or are subject to a demand feature exercisable and payable within five business days. UBS, *UBS Liquid Assets Government Fund* (last accessed Dec. 15, 2020), <https://usmoneymarketfunds.com/subpages/CFG7/weekly-liquid-assets.html>.

<sup>28</sup> FITCH RATINGS, *US Money Market Fund NAVs Rebound in 2Q20 Following Coronavirus Volatility* (June 25, 2020), <https://www.fitchratings.com/research/fund-asset-managers/us-money-fund-navs-rebound-in-2q20-following-coronavirus-volatility-25-06-2020>

<sup>29</sup> FEDERAL RESERVE SYSTEM, *Federal Reserve Board broadens program of support for the flow of credit to households and businesses by establishing a Money Market Mutual Fund Liquidity Facility* (March 18, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200318a.htm>.

<sup>30</sup> *Id.*

<sup>31</sup> FEDERAL RESERVE SYSTEM, *Money Market Mutual Fund Liquidity Facility* (March 23, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200323b4.pdf>.

<sup>32</sup> FEDERAL RESERVE SYSTEM, *Money Market Mutual Fund Liquidity Facility FAQs* (March 21, 2020, amended May 26, 2020.), <https://www.federalreserve.gov/monetarypolicy/files/mmlf-faqs.pdf>.

<sup>33</sup> *Id.*

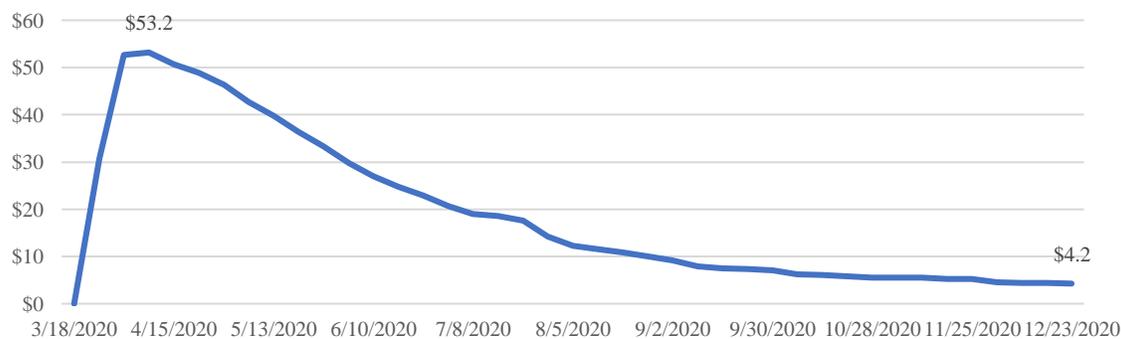
<sup>34</sup> *See supra* note 21.

<sup>35</sup> FEDERAL RESERVE SYSTEM, *Federal Reserve Statistical Release for the week ending December 23, 2020* (December 28, 2020), <https://www.federalreserve.gov/releases/h41/current/h41.htm>.

<sup>36</sup> U.S. SEC. & EXCH. COMM’N, DIVISION OF INVESTMENT MANAGEMENT OFFICE, *Money Market Fund Statistics* (April 13, 2020), <https://www.sec.gov/files/mmf-statistics-2020-03.pdf>.

prime NAVs reversed course, reaching \$1.0008 by the beginning of May.<sup>37</sup> And BIS analysis shows that within days of the MMLF’s launch, U.S. prime institutional fund WLAs had recovered—no such funds were in breach of the 30% regulatory threshold by the end of March.<sup>38</sup> Following this market stabilization, the MMLF’s total outstanding loan levels decreased consistently after April 8; by December 23, the loans outstanding had dropped to \$4.2 billion.<sup>39</sup> **Figure 8** below demonstrates the MMLF loans outstanding since inception.

Figure 8: MMLF loans outstanding as of December 23, 2020 (\$B)



Source: Fed H.4.1 statistical release.

### *Term Asset-Backed Securities Loan Facility*

Markets in asset-backed securities (“ABS”) backed by U.S. business and consumer credit, such as credit card receivables and small business loans, play a critical role in supporting the provision of credit to the real economy. This approximately \$1.55 trillion ABS market came under considerable pressure in mid-March.

As displayed in **Figure 9** below, ABS issuance registered \$36.9 billion in February, but dropped to \$21.6 billion in March, as new ABS issuances stopped completely in mid-March.<sup>40</sup> There were no new ABS issuances at all through early April, but issuance of ABS backed by auto loans returned after a couple of weeks. There were no new issuances of ABS backed by credit card receivables, commercial mortgages, or student loans through April, and total issuance for ABS dropped to a 2020 low of \$11.8 billion.<sup>41</sup> While a significant shock to markets, this fell short of

<sup>37</sup> FITCH RATINGS, *US Money Market Fund NAVs Rebound in 2Q20 Following Coronavirus Volatility* (June 25, 2020), <https://www.fitchratings.com/research/fund-asset-managers/us-money-fund-navs-rebound-in-2q20-following-coronavirus-volatility-25-06-2020>.

<sup>38</sup> Eren Egemen, Andreas Schrimpf, and Vladyslav Sushko, *US dollar funding markets during the Covid-19 crisis – the money market fund turmoil*, BIS Bulletin No. 14, BANK FOR INTERNATIONAL SETTLEMENTS (May 12, 2020), <https://www.bis.org/publ/bisbull14.htm>.

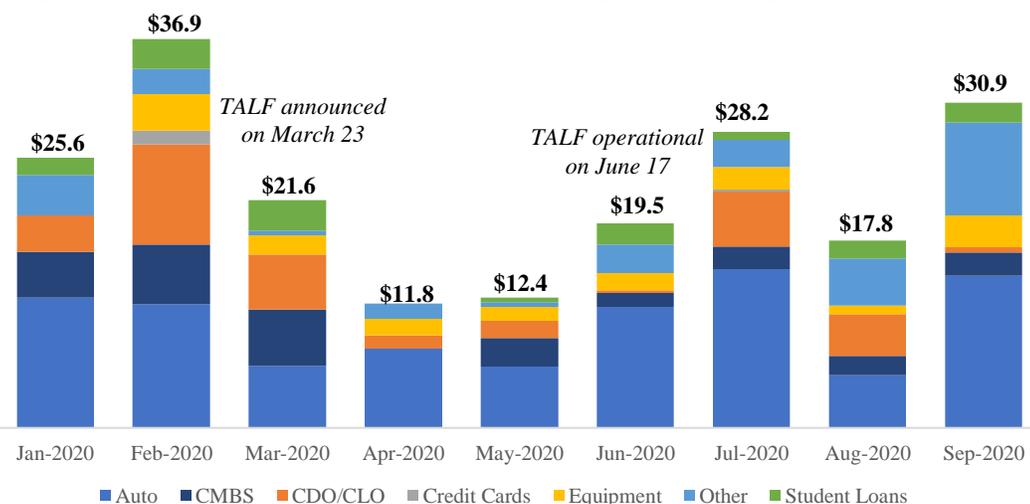
<sup>39</sup> FEDERAL RESERVE SYSTEM, *Federal Reserve Statistical Release for the week ending December 23, 2020* (December 28, 2020), <https://www.federalreserve.gov/releases/h41/current/h41.htm>.

<sup>40</sup> SIFMA, *US ABS Issuance and Outstanding* (Oct. 6, 2020), <https://www.sifma.org/resources/research/us-abs-issuance-and-outstanding/> (ABS market size is as of the end of Q1 2020). Banerji, Gunjan and Julia-Ambra Verlaine, *The Reach for Yield Survives Coronavirus Market Shock*, THE WALL STREET JOURNAL (April 27, 2020), <https://www.wsj.com/articles/the-reach-for-yield-survives-coronavirus-market-shock-11587979802>.

<sup>41</sup> SIFMA, *US ABS Issuance and Outstanding* (Oct. 6, 2020), <https://www.sifma.org/resources/research/us-abs-issuance-and-outstanding/>.

the volatility and panic that overtook ABS markets during the 2008 financial crisis, when ABS issuance backed by auto loans and credit cards fell to zero in August and October 2008.<sup>42</sup> **Figure 9** demonstrates the impact of the COVID-19 crisis on ABS issuance in March and April 2020.

Figure 9: Monthly ABS issuance by underlying collateral type (\$B)



Note: Totals in parentheses. SIFMA defines "Other" as: "Anything that does not fit into any of the above categories, including those with mixed asset categories (e.g., tax liens, trade receivables, boat loans, etc.)."

To stabilize securitization markets and enable ABS issuance, the Fed announced on March 23 that it would revive the Term Asset-Backed Securities Loan Facility ("TALF").<sup>43</sup> Under TALF, the FRBNY lends to an SPV that makes three-year loans to eligible U.S. businesses that are secured by eligible ABS pledged as collateral.<sup>44</sup> Collateral eligible for TALF includes certain ABS where the underlying credit exposures are auto loans, student loans, credit card receivables, commercial mortgages, and leveraged loans; TALF collateral is subject to specified haircuts based on the sector, subsector, and average life of the ABS. With certain exceptions, eligible ABS must be issued on or after March 23, 2020 (exceptions include commercial mortgage-backed securities, which must have been issued *before* March 23, 2020). Eligible ABS must also satisfy minimum credit rating requirements. The size of the TALF is initially limited to \$100 billion in loans. Like the analogous facility established by the Fed in 2008, TALF received Treasury backing. This backing allows the TALF to increase the amount of lending that it can engage in, consistent with the collateral requirements of Section 13(3) of the Federal Reserve Act.<sup>45</sup> Some of the securitized loans have collateral of uncertain value, like auto loans secured by autos, or no real collateral, like student loans. Treasury support for the facility is provided in the form of a \$10 billion equity investment in the SPV, using funds from the ESF appropriated under the CARES Act. The TALF became operational on June 17, 86 days after it was announced.

<sup>42</sup> Agarwal, Sumit, Jacqueline Barret, Crystal Cun, and Mariacristina De Nardi, *The asset-backed securities markets, the crisis, and TALF*, FEDERAL RESERVE BANK OF CHICAGO (Dec. 16, 2010), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1726548](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1726548).

<sup>43</sup> FEDERAL RESERVE BANK OF NEW YORK, *TALF FAQs* (Sept. 1, 2020), <https://www.newyorkfed.org/medialibrary/media/markets/talfdocs/talf-faqs-marked-200901.pdf>.

<sup>44</sup> FEDERAL RESERVE SYSTEM, *Term Asset-Backed Securities Loan Facility* (July 28, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a6.pdf>.

<sup>45</sup> See *supra* note 21.

By the end of June, TALF had extended \$250 million of loans. As demonstrated by **Figure 10**, the pace of lending picked up in July and August, before slowing in September and October. As of December 23, TALF loans outstanding stood at \$3.7 billion, a small fraction of the \$100 billion capacity set out by the Fed.<sup>46</sup> That is in part because TALF provided a backstop for the securitization market. The announcement of TALF caused ABS spreads to drop, returning to pre-pandemic levels.<sup>47</sup> In addition, as seen in **Figure 9**, issuance of ABS backed by TALF-eligible collateral such as auto loans and student loans had also returned close to pre-pandemic levels before TALF became operational. As a result, the economics of participating in TALF by borrowing to acquire ABS became less favorable, and many investment firms that had planned to participate in TALF held off. Indeed, nearly 4-in-5 of TALF’s loans have been issued to just two investment firms, which have engaged in relatively small-scale, focused purchases of particular classes of ABS.<sup>48</sup>

Figure 10: TALF loans outstanding as of December 23, 2020 (\$B)



Source: Fed H.4.1 statistical release.

### Corporate Credit Facilities

The pandemic significantly disrupted corporate credit markets. On March 2, investment grade and high yield credit spreads<sup>49</sup>— the difference between the yield of the applicable credit index and U.S. Treasuries— sat comfortably at 80 (for AAA rated bonds), 80 (AA rated), 100 (A rated), 170 (BBB rated), and 500 (high yield) basis points. However, as demonstrated by **Figure 11** on the next page, as markets responded to the COVID-19 crisis, spreads for these bonds

<sup>46</sup> FEDERAL RESERVE SYSTEM, *Federal Reserve Statistical Release for the week ending December 23, 2020* (December 28, 2020), <https://www.federalreserve.gov/releases/h41/current/h41.htm>.

<sup>47</sup> Elizabeth Caviness and Asani Sarkar, *Securing Secured Finance: The Term Asset-Backed Securities Loan Facility*, FEDERAL RESERVE BANK OF NEW YORK: LIBERTY STREET ECONOMICS (Aug. 7, 2020), <https://libertystreeteconomics.newyorkfed.org/2020/08/securing-secured-finance-the-term-asset-backed-securities-loan-facility.html>.

<sup>48</sup> Jon Prior, *Was Reboot of this Fed Crisis-Relief Program a Bust?*, AMERICAN BANKER (Nov. 17, 2020), <https://www.americanbanker.com/news/was-reboot-of-this-fed-crisis-relief-program-a-bust>.

<sup>49</sup> Investment grade credit spreads are measured by the ICE BoA AAA, AA, A, and BBB Option Adjusted Spread indices minus a spot Treasury curve, and high yield credit spreads are measured by and ICE BoA High Yield Bond Index Option Adjusted Index minus a spot Treasury curve.

skyrocketed to 235, 276, 324, 465, and 1009 basis points, respectively, by March 20.<sup>50</sup> These spread increases were dramatic; however, they do not compare to the all-time highs witnessed during the financial crisis. The spreads for investment grade and high yield bonds hit their widest marks between the end of November and mid-December of 2008, at 414 (AAA), 515 (AA), 649 (A), 804 (BBB), and 2182 (high yield) basis points.<sup>51</sup>

The cost of corporate bond transactions measured by bid-ask spreads on corporate bonds also jumped significantly. According to research from Brookings, bid-ask spreads on investment grade corporate debt stood at 37 basis points on February 3 but jumped significantly to 221 basis points by March 20. High yield debt bid-ask spreads also spiked, rising from 57 basis points to 223 over the same period.<sup>52</sup>

The disruption in corporate bond markets was also evident in the market for fixed income exchange-traded funds (“ETFs”). As corporate bond prices fell in early March, the prices of fixed income ETFs fell even further, as fixed income investors sold off their more liquid ETF shares. This sell-off led to historically large gaps between the prices of the more liquid ETFs and their much less liquid underlying assets. For example, the price of Vanguard’s \$55 billion total bond market ETF—one of the world’s largest ETFs—has averaged a small 0.17 percent premium to the “net asset value” of the underlying bonds in its portfolio. On March 12, its price fell to a 6.2 percent discount relative to the value of its underlying assets.<sup>53</sup>

In a highly unusual step, the Fed decided to directly intervene in corporate credit markets. On March 23, as demonstrated by **Figure 11** on the next page, the Fed announced the Primary Market Corporate Credit Facility (the “PMCCF”)<sup>54</sup> and the Secondary Market Corporate Credit Facility (the “SMCCF”)<sup>55</sup> and together, the “CCFs”) under Section 13(3) of the Federal Reserve Act. The objective of the PMCCF is to provide a funding backstop for eligible corporate debt through primary market purchases to ensure companies have access to funds needed to maintain business operations. Under the PMCCF, the FRBNY lends to an SPV that purchases qualifying bonds and portions of syndicated bonds or loans at issuance. Debt purchased through the PMCCF must have a maturity of four years or less and be issued by an eligible issuer (described below).

<sup>50</sup> ICE BoA AAA, AA, A, BBB, and High Yield Option-Adjusted Spreads are accessed through FEDERAL RESERVE BANK OF ST. LOUIS, *FRED Database* (2020), <https://fred.stlouisfed.org/>.

<sup>51</sup> *Id.*

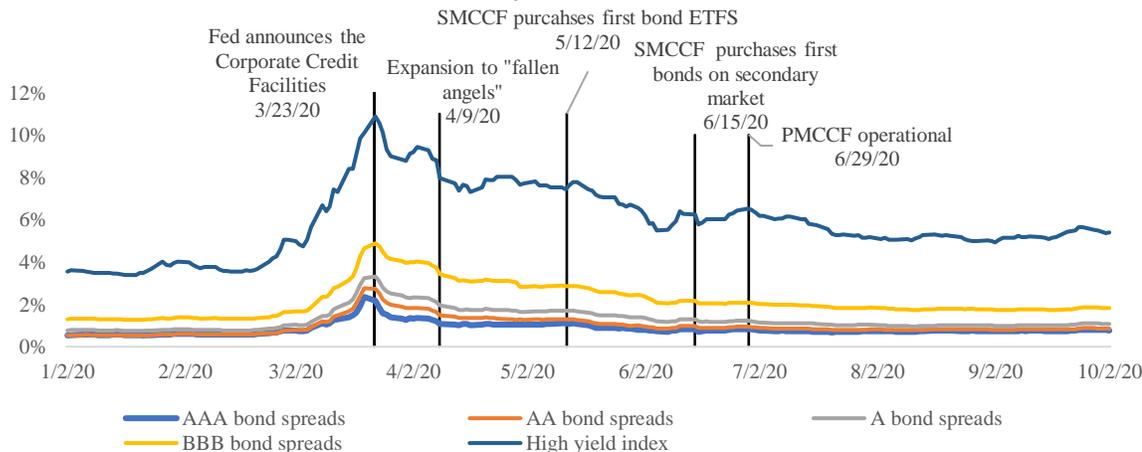
<sup>52</sup> Author calculations of Gilchrist, Simon, Bin Wei, Vivian Z. Yue, and Egon Zakrajšek, *The Fed Takes on Corporate Credit Risk: An Analysis of the Efficacy of the SMCCF*, NBER Working Paper No. 27809, NATIONAL BUREAU OF ECONOMIC RESEARCH (September 2020), [https://www.nber.org/system/files/working\\_papers/w27809/w27809.pdf](https://www.nber.org/system/files/working_papers/w27809/w27809.pdf); J. Nellie Liang, *Corporate Bond Market Dysfunction During COVID-19 and Lessons from the Fed’s Response*, Hutchins Center Working Paper No. 69, BROOKINGS (Oct. 1, 2020), [https://www.brookings.edu/wp-content/uploads/2020/10/WP69-Liang\\_1.pdf](https://www.brookings.edu/wp-content/uploads/2020/10/WP69-Liang_1.pdf).

<sup>53</sup> Chris Flood and Robin Wigglesworth, *Vanguard’s \$55bn fixed income ETF hit by price dislocation*, FINANCIAL TIMES (March 17, 2020), <https://www.ft.com/content/3d452b5c-a767-48ad-9b8d-ba3af7d54419>.

<sup>54</sup> FEDERAL RESERVE SYSTEM, *Primary Market Corporate Credit Facility* (July 28, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a9.pdf>.

<sup>55</sup> FEDERAL RESERVE SYSTEM, *Secondary Market Corporate Credit Facility* (July 28, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a1.pdf>.

Figure 11: Investment grade and high yield corporate bond spreads, January to October 2020



Source: ICE BoA AAA, AA, A, BBB, and High Yield Option-Adjusted Spreads; accessed through St. Louis Fed FRED database.

The objectives of the SMCCF are to broadly support secondary credit markets, to support primary credit market issuance for solvent borrowers, and to reduce the severity of disruptions in secondary credit markets.<sup>56</sup> Under the SMCCF, the same SPV used for the PMCCF purchases, with financing from the FRBNY, qualifying individual corporate bonds (based on a broad-based market index constructed by the Fed) and exchange-traded funds that invest in corporate bonds. Individual bonds purchased through the SMCCF must have been issued by an eligible issuer, have a remaining maturity of five years or less, and be sold by qualifying sellers. Eligible issuers for the PMCCF and for the SMCCF’s individual bond buying program generally include non-bank U.S. investment grade companies, and on April 9 (as demonstrated by **Figure 11**) were expanded to include certain “fallen angels” that were investment grade as of March 22 and rated at least BB-/Ba3 at the time of purchase. The combined size of both facilities is up to \$750 billion. Treasury has committed to support the CCFs through a \$75 billion equity investment in the shared SPV, using funds appropriated to the ESF by the CARES Act.

As further demonstrated by **Figure 11** above, the SMCCF began purchasing shares in bond ETFs on May 12 (50 days after the facility was announced) and individual corporate bonds on June 15 (84 days after the facility was announced); the PMCCF became operational on June 29 (98 days after the facility was announced) but has yet to purchase any corporate bonds.<sup>57</sup> As of December 23, the SMCCF had purchased approximately \$14.2 billion worth of individual corporate bonds and bond ETFs, representing only 1.9% of the CCFs’ combined maximum size of \$750 billion.<sup>58</sup>

<sup>56</sup> *Investment Management Agreement (Secondary Market Corporate Credit Facility)*, dated as of May 11, 2020, by and between CORPORATE CREDIT FACILITIES LLC and BLACKROCK FINANCIAL MANAGEMENT, INC., as amended by that *Amendment to Investment Management Agreement*, dated as of Oct. 7, 2020, [https://www.newyorkfed.org/medialibrary/media/markets/SMCCF\\_Investment\\_Management\\_Agreement.pdf](https://www.newyorkfed.org/medialibrary/media/markets/SMCCF_Investment_Management_Agreement.pdf).

<sup>57</sup> FEDERAL RESERVE BANK OF NEW YORK, *FAQs: Primary Market Corporate Credit Facility and Secondary Market Corporate Credit Facility* (July 23, 2020), <https://www.newyorkfed.org/markets/primary-and-secondary-market-faq/corporate-credit-facility-faq>.

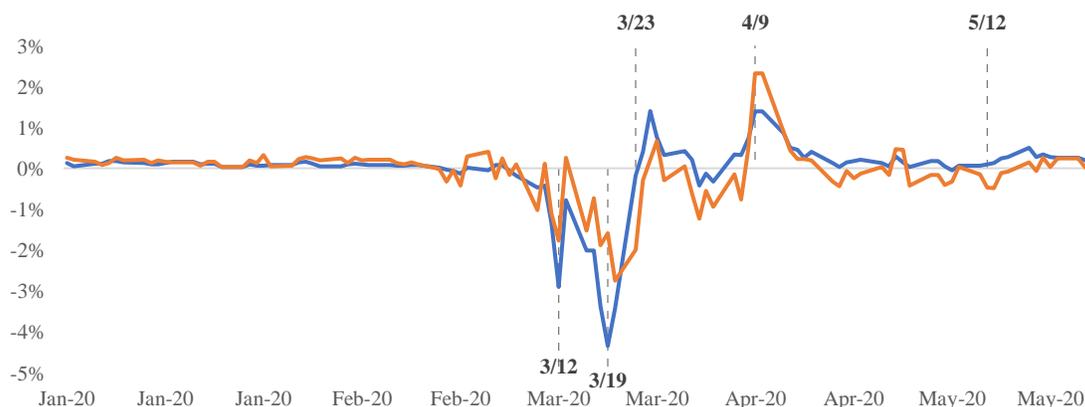
<sup>58</sup> FEDERAL RESERVE SYSTEM, *Federal Reserve Statistical Release for the week ending December 23, 2020* (December 28, 2020), <https://www.federalreserve.gov/releases/h41/current/h41.htm>.

The Fed’s announcement of the CCFs on March 23 corresponded with positive reactions from the credit markets. As displayed in **Figure 11** above, AAA, AA, A, BBB, and high yield credit spreads stood at 218, 273, 331, 488, and 1087 basis points on March 23. The March 23 announcement of the facility was followed by drops in spreads across the board, with respective drops to 126, 182, 232, 396, and 877 basis points by March 31. Credit spreads continued to narrow across the different rating grades after the Fed began purchasing bond ETFs on May 15. AAA through high yield credit spreads were respectively at 107, 126, 168, 285, and 778 basis points on May 15 and ended the month at 80, 101, 140, 244, and 654 basis points – near pre-COVID levels.<sup>59</sup>

Bid-ask spreads were also positively impacted by the announcement of the program. Investment grade bid-ask spreads dropped from 221 basis points on March 20 to 136 by March 27. High yield bid-ask spreads reacted similarly to the March 23 announcement and dropped from 223 basis points to 192 over the same period.<sup>60</sup>

The announcement of the CCFs also helped stabilize the fixed income ETF market. When the CCFs were first announced on March 23, ETFs that focused primarily on investment grade ETFs experienced a significant price increase; ineligible ETFs focused on high yield bonds experienced a noticeable, but smaller, price increase. These increases led fixed income ETFs to trade at a premium to the underlying value of their assets. On April 9, when the CCFs were expanded to include fallen angels, the price of fixed income ETFs surged again—this time led by newly-eligible high-yield ETFs. By May 12, when the SMCCF actually started purchasing shares of fixed income ETFs, the average premium/discount for bond ETFs relative to the net asset value of their underlying assets had already stabilized close to its pre-March average (see **Figure 12**).

Figure 12: Average premium/discount to NAV (unweighted)



<sup>59</sup> ICE BoA AAA, AA, A, BBB, and High Yield Option-Adjusted Spreads are accessed through FEDERAL RESERVE BANK OF ST. LOUIS, *FRED Database* (2020), <https://fred.stlouisfed.org/>.

<sup>60</sup> Author calculations of Gilchrist, Simon, Bin Wei, Vivian Z. Yue, and Egon Zakrajšek, *The Fed Takes on Corporate Credit Risk: An Analysis of the Efficacy of the SMCCF*, NBER Working Paper No. 27809, NATIONAL BUREAU OF ECONOMIC RESEARCH (September 2020), [https://www.nber.org/system/files/working\\_papers/w27809/w27809.pdf](https://www.nber.org/system/files/working_papers/w27809/w27809.pdf); J. Nellie Liang, *Corporate Bond Market Dysfunction During COVID-19 and Lessons from the Fed’s Response*, Hutchins Center Working Paper No. 69, BROOKINGS (Oct. 1, 2020), [https://www.brookings.edu/wp-content/uploads/2020/10/WP69-Liang\\_1.pdf](https://www.brookings.edu/wp-content/uploads/2020/10/WP69-Liang_1.pdf).

Recent National Bureau of Economic Research (“NBER”) research focused on the SMCCF shows the facility’s announcement and operations led to enhanced liquidity in the secondary credit markets. Using TRACE data, Gilchrist et al. (2020) were able to isolate the impact of the facility on eligible bonds relative to ineligible bonds. They estimate that the SMCCF announcements on March 23 and April 9 narrowed credit spreads for SMCCF-eligible bonds issued by a set of firms by 20 basis points relative to ineligible bonds issued by the same set of firms. Using bond bid-ask spreads as a measure of credit market liquidity, the authors estimate that the liquidity in credit markets increased immediately due to the announcement, with bid-ask spreads on eligible bonds narrowing 10 basis points relative to ineligible bonds within 10 days of the announcement. They found even stronger positive results for eligible fallen angels, which experienced an additional narrowing of five basis points for credit spreads and two basis points for bid-ask spreads relative to the other SMCCF eligible bonds.<sup>61</sup>

The CCFs are intended to support bond market liquidity generally, not support the flow of credit to particular industries—even those, for example, that have been disproportionately affected by the COVID-19 pandemic. As such, the terms of the PMCCF are generally applicable to all eligible issuers, and the SMCCF is designed to support corporate credit markets through bond purchases that generally track the composition of the broad, diversified universe of eligible secondary market bonds and the purchase of ETFs that offer broad exposure to the U.S. corporate bond market.

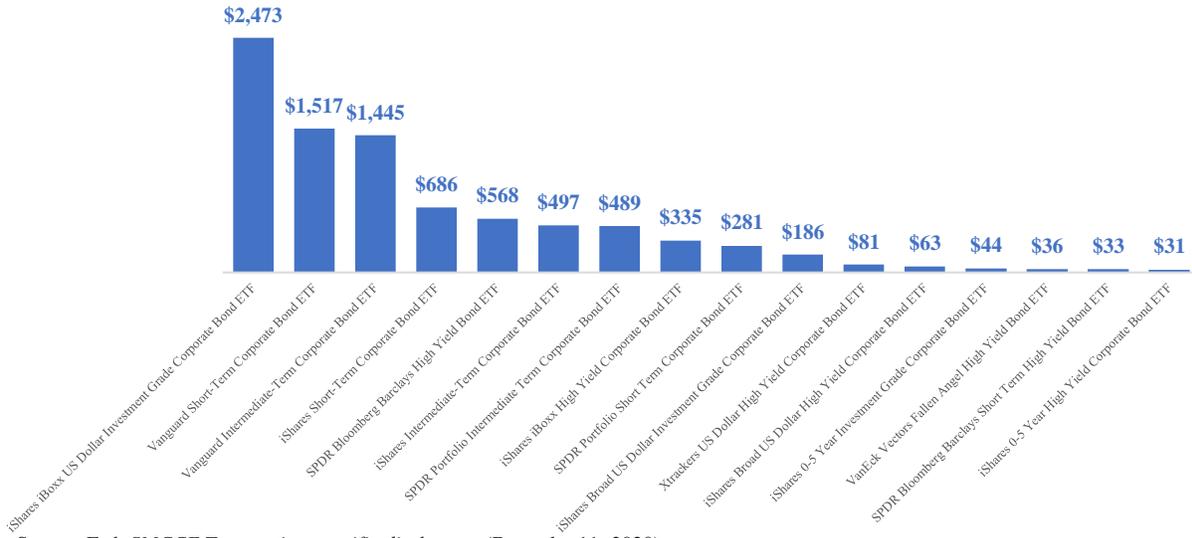
We now provide further detail as to the holdings of the SMCCF for informational purposes. The majority of the SMCCF’s purchases have been of bond ETF shares—from May 12 to July 27, the SMCCF purchased shares of 16 bond ETFs for a total market value of \$8.8 billion as of November 30, 2020 – representing 63% of its holdings as of that date.<sup>62</sup> As **Figure 13** demonstrates, the majority of these November 30 holdings were split between three ETFs: (1) the iShares iBoxx U.S. Dollar Investment Grade Corporate Bond ETF (comprising 28.2% of the SMCCF’s ETF holdings, by market value); (2) the Vanguard Short-Term Corporate Bond ETF (17.3%); and (3) the Vanguard Intermediate-Term Corporate Bond ETF (16.5%).

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<sup>61</sup> Gilchrist, Simon, Bin Wei, Vivian Z. Yue, and Egon Zakrajšek, *The Fed Takes on Corporate Credit Risk: An Analysis of the Efficacy of the SMCCF*, NBER Working Paper No. 27809, NATIONAL BUREAU OF ECONOMIC RESEARCH (September 2020), [https://www.nber.org/system/files/working\\_papers/w27809/w27809.pdf](https://www.nber.org/system/files/working_papers/w27809/w27809.pdf).

<sup>62</sup> FEDERAL RESERVE SYSTEM, *SMCCF Transaction-specific disclosures* (Dec. 11, 2020), <https://www.federalreserve.gov/monetarypolicy/files/smccf-transaction-specific-disclosures-12-11-20.xlsx>

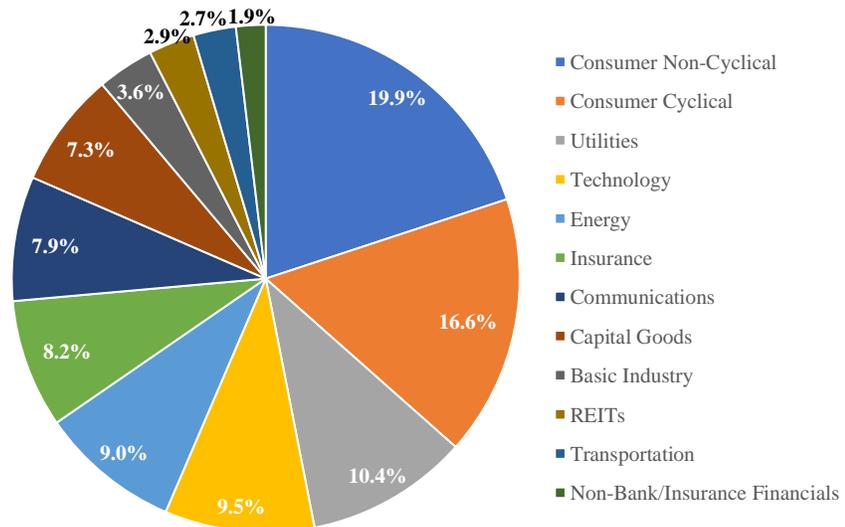
Figure 13: Market Value of SMCCF bond ETF holdings as of November 30, 2020 (\$M)



Source: Fed, SMCCF Transaction-specific disclosures (December 11, 2020).

The SMCCF purchased individual corporate bonds across a range of sectors based on its own broad market index, which is recalculated approximately every month. Since the broad market index is meant to generally track the composition of eligible bonds traded on the secondary market, the SMCCF’s portfolio of individual bonds reflects the makeup of the investment grade (and formerly investment grade) corporate bond market. As of November 30, 2020, “Consumer Non-Cyclical” was the most heavily represented sector at 19.9%, followed by “Consumer Cyclical” at 16.6%, as displayed in Figure 14.

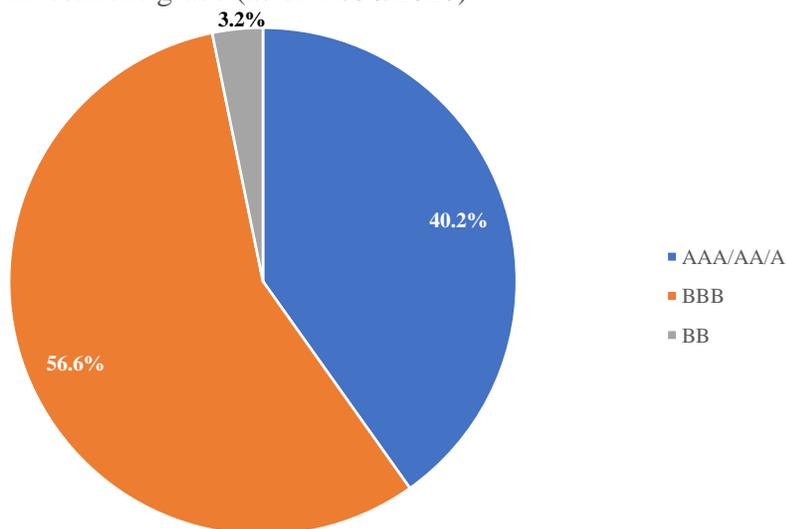
Figure 14: Percent of total par value of secondary bond holdings by sector (as of 11/30/2020)



Source: Fed, SMCCF Transaction-specific disclosures (December 11, 2020).

In terms of the investment grade of the facility’s November 30, 2020 individual bond holdings, **Figure 15** below shows that bonds rated “BBB” represented 56.6% of total par value, “AAA-A-A” rated bonds represented 40.2%, and the remaining 3.2% were rated “BB.”<sup>63</sup>

Figure 15: Percent of total par value of secondary bond holdings by investment grade (as of 11/30/2020)



Source: Fed, *SMCCF Transaction-specific disclosures* (December 11, 2020).

### Conclusion

The six U.S. Treasury Department and Fed credit facilities evaluated in Part I were each successful in addressing funding strains in financial and corporate credit markets. These facilities largely acted as a backstop to financial markets, allowing private sector lending to resume. In other words, it was the existence of the facilities rather than the amount that they lent that stabilized markets. Indeed, as demonstrated by **Figure 1**, only \$22.6 billion in loans remains outstanding and only \$86.2 billion in total loans were extended by these facilities during their peak usage. Financial and corporate funding markets remain stable.

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<sup>63</sup> *Id.*

## Part II: Government Support for U.S. SMEs

The pandemic has had severe consequences for the SMEs that serve as the lifeblood of the American economy and the need to support these businesses has posed unique challenges for policymakers. The health and continued functioning of SMEs are pivotal for a robust U.S. economic recovery—U.S. businesses with 500 or fewer employees make up 44% of U.S. GDP, and U.S. businesses with \$10 million to \$1 billion in annual revenue represent one third of GDP and employ approximately 44.5 million people.<sup>64</sup>

Part II begins by setting forth data on COVID-19’s initial impact on SMEs in Q2 2020. It then describes two key policy measures intended to provide support to SMEs, the Paycheck Protection Program and Main Street Lending Program, and presents data on their impacts. The section concludes by providing data regarding the ongoing challenges facing SMEs despite the existence of the PPP and MSLP and their need for additional financial support.

### *COVID-19 and SMEs: Initial Impact in Q2 2020*

SMEs suffered greatly at the onset of COVID-19 pandemic. The Dun & Bradstreet Small Business Health Index<sup>65</sup>—which follows a sample of business with less than 100 employees and measures their payment patterns, failure rates, and credit usage trends—dropped significantly to 80.7 in April from 84.0 in March (**Figure 16**). This drop indicates that small business failure rates, credit use, and payment delinquencies spiked at the onset of the COVID-19 crisis.<sup>66</sup> There was a minor uptick after April, but the index remained suppressed through the end of Q2 at 82.8.

Figure 16: Dun & Bradstreet Small Business Health Index, January 2020 to June 2020



Source: Dun and Bradstreet data as of September 27, 2020.

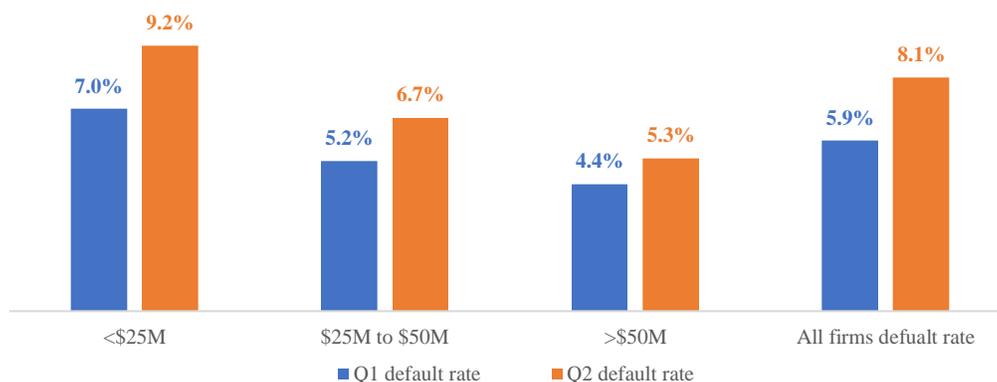
<sup>64</sup> NATIONAL CENTER FOR THE MIDDLE MARKET, *Middle Market Indicator Overview* (last accessed Dec, 15, 2020), <https://www.middlemarketcenter.org/middle-market-indicator-overview>; SMALL BUSINESS ASSOCIATION, *Small Businesses Generate 44 Percent Of U.S. Economic Activity*, SBA Release No. 19-1, U.S. SMALL BUSINESS ADMIN. OFFICE OF ADVOCACY <https://advocacy.sba.gov/2019/01/30/small-businesses-generate-44-percent-of-u-s-economic-activity/>.

<sup>65</sup> The index’s base year is 2004 and a value of 100 or more indicates an improvement in small business health relative to 2004.

<sup>66</sup> DUN & BRADSTREET, *U.S. Economic Health Tracker* (August 2020), [https://www.dnb.com/content/dam/english/economic-and-industry-insight/DNB\\_Economic\\_Health\\_Tracker\\_AugustV2\\_2020.pdf](https://www.dnb.com/content/dam/english/economic-and-industry-insight/DNB_Economic_Health_Tracker_AugustV2_2020.pdf).

The crisis also put increased pressure on middle-market firms and their ability to meet debt obligations. The Proskauer Private Credit Default Index—an index created using a sample of loans issued primarily to mid-sized, private-equity backed businesses—showed that default rates increased to 8.1% in Q2 from 5.9% in Q1.<sup>67</sup> **Figure 17** below illustrates that smaller firms within this group of mid-sized borrowers have experienced higher default rates in comparison to larger firms: the default rate of firms with EBITDA less than \$25 million was 9.2% in Q2, while default rates of firms with EBITDA of \$50 million or more was 5.3% in the same quarter. This result is in part due to smaller firms traditionally facing more restrictive loan covenants compared to larger firms.<sup>68</sup>

Figure 17: Q1 to Q2 2020 change in default rates by firm size



Source: Proskauer, Q1 and Q2 Private Credit Default Index. Q1 data consists of 576 deals and Q2 data consists of 546 deals.

Given the financial challenges faced by SMEs and their importance to the U.S. economy discussed above, the U.S. government intervened to provide financial support through the Paycheck Protection Program and Main Street Lending Program. The legal authority and funding for both were established by the CARES Act enacted on March 27, 2020.

### *Paycheck Protection Program*

The Paycheck Protection Program (“**PPP**”) is a loan program established by the CARES Act and implemented by the Small Business Administration (“**SBA**”) with support from the U.S. Treasury, which provided SBA-guaranteed loans to small businesses with less than 500 employees, nonprofit organizations with less than 500 employees and independent contractors. PPP loans are subject to certain size and interest rate caps, and recipients must only use the funds for payroll costs, rent, utilities, and pre-existing debt interest.<sup>69</sup> Borrowers that comply with the program’s terms can obtain PPP loan forgiveness equal to their covered payroll, rent, utility, and debt interest payments the eight weeks after loan origination,<sup>70</sup> subject to downward adjustment if

<sup>67</sup> PROSKAUER, *Proskauer Releases Q2 Private Credit Default Index* (July 29, 2020), <https://www.proskauer.com/release/proskauer-releases-q2-private-credit-default-index>; PROSKAUER, *Proskauer Introduces Private Credit Default Index* (May 27, 2020), <https://www.proskauer.com/release/proskauer-introduces-innovative-private-credit-default-index>.

<sup>68</sup> *Id.*

<sup>69</sup> CARES Act, , *supra* note 5, at §1102(a)(2).

<sup>70</sup> CARES Act, , *supra* note 5, at §1106(b); PUB. L. 116-142, *Paycheck Protection Program Flexibility Act of 2020* (June 5, 2020), <https://www.congress.gov/bill/116th-congress/house-bill/7010> [“**PPP Flexibility Act**”].

the recipient reduced its workforce.<sup>71</sup> At least 60% of the amount forgiven must have been used for payroll costs.<sup>72</sup>

The SBA and Treasury began implementing the PPP on April 3, relying on private lenders to collect borrower application materials, review them for eligibility, and process loans. Due to high demand, the \$349 billion initially appropriated to the PPP by the CARES Act was exhausted in 14 days by April 17. Congress subsequently expanded the program by \$321 billion through the Paycheck Protection Program and Health Care Enhancement Act enacted on April 24.<sup>73</sup> Congress extended the deadline to issue loans, from June 31 to August 8, and the duration in which borrowers could use the loan proceeds for forgivable expenses, from eight to 24 weeks.<sup>74</sup> Approximately \$525 billion in PPP loans, about \$145 billion less than the total amount authorized, were approved before the PPP lending window expired on August 8.

The banks participating in the PPP were eligible to receive fees on the loans they extended, ranging between 5% on loans up to \$350,000 and 1% on loans larger than \$2 million. Analysis by the investment bank Keefe Bruyette & Woods estimates the median fee received by banks to be 3%.<sup>75</sup> However, banks have indicated that they do not expect sizeable profits to be made off the fees due to the increased costs associated with developing the infrastructure and teams needed to lend the PPP funds.<sup>76</sup> JP Morgan stated that expected profit from the PPP will be near zero and Bank of America is expecting minimal profit if any.<sup>77</sup>

Data on the impact of the PPP funds administered is still nascent, but certain studies suggest that the program has had positive impacts on employment and the health of eligible businesses. Bartik et al. (2020)<sup>78</sup> employ survey data from Alignable and show that PPP loans led to a 14% to 30% increase in a business' probability of survival. Autor et al. (2020)<sup>79</sup> corroborate this finding using Automatic Data Processing data, and show that PPP eligible firms experienced a 3.25%

<sup>71</sup> CARES Act, , *supra* note 5, at §1106(d).

<sup>72</sup> PPP Flexibility Act, *supra* note 70, at §3(b). According to guidance issued by the SBA, loans issued under the PPP were initially forgivable only to the extent that 75% of the amount forgiven was attributable to payroll costs. SMALL BUSINESS ADMINISTRATION, *Business Loan Program Temporary Changes; Paycheck Protection Program*, 85 FED. REG. 20811 (April 15, 2020), <https://www.federalregister.gov/documents/2020/04/15/2020-07672/business-loan-program-temporary-changes-paycheck-protection-program>. Congress subsequently added the provision specifying that only 60% of the forgivable amount needed to be attributable to payroll costs.

<sup>73</sup> PUB. L. 116-139, *Paycheck Protection Program and Health Care Enhancement Act* (April 24, 2020), <https://www.congress.gov/bill/116th-congress/house-bill/748>.

<sup>74</sup> PUB. L.116-147, *To extend the authority for commitments for the paycheck protection program and separate amounts authorized for other loans under section 7(a) of the Small Business Act, and for other purposes* (July 4, 2020), <https://www.congress.gov/bill/116th-congress/senate-bill/4116/>; PUB. L.116-142, *Paycheck Protection Program Flexibility Act of 2020* (June 5, 2020), <https://www.congress.gov/bill/116th-congress/house-bill/7010>.

<sup>75</sup> Cowley, Stacy, "Despite Billions in Fees, Banks Predict Meager Profits on P.P.P. Loans," *New York Times* (October 1, 2020), <https://www.nytimes.com/2020/10/01/business/ppp-loans-bank-profits.html?referringSource=articleShare>

<sup>76</sup> Benoit, David and Peter Rudegeair, "Banks Could Get \$24 Billion in Fees From PPP Loans," *Wall Street Journal* (July 7, 2020), <https://www.wsj.com/articles/banks-could-get-24-billion-in-fees-from-ppp-loans-11594134444>

<sup>77</sup> Cowley, Stacy, "Despite Billions in Fees, Banks Predict Meager Profits on P.P.P. Loans," *New York Times* (October 1, 2020), <https://www.nytimes.com/2020/10/01/business/ppp-loans-bank-profits.html?referringSource=articleShare>

<sup>78</sup> Alexander W. Bartik, Zoe B. Cullen, Edward L. Glaeser, Michael Luca, Christopher T. Stanton & Adi Sunderam, *The targeting and impact of Paycheck Protection Program loans to small businesses*. NBER Working Paper 27623, NATIONAL BUREAU OF ECONOMIC RESEARCH (July 2020), <https://www.nber.org/papers/w27623>.

<sup>79</sup> David Autor, David Cho, Leland D. Crane, Mita Goldar, Byron Lutz, Joshua Montes, William B. Peterman, David Ratner, Daniel Villar, Ahu Yildirmaz, *An Evaluation of the Paycheck Protection Program Using Administrative Payroll Microdata*, MIT (July 22, 2020), <https://economics.mit.edu/files/20094>.

increase in employment compared to non-eligible firms through the end of June. The authors estimate that the program likely increased employment by approximately 2.3 million jobs.

Hubbard and Strain (2020) evaluate Dun & Bradstreet data and also find significant positive impacts of the PPP on employment, firm financial health, and probability of firm survival. They find that these effects were more pronounced among smaller firms eligible for PPP loans than among eligible firms closer to the 500-employee cutoff. They also find that the positive effects of the program were more pronounced in June than in April or May, which the authors attribute to two possible explanations: (1) PPP loans needed time to “kick in”; or (2) the loans were more effective once economies partially reopened in June.

However, although the PPP may have saved jobs, it may have done so at a very high cost. For example, Autor et al. (2020) attempt to measure the cost of each job saved by the PPP, and determine the cost to be \$224,000 worth of PPP funds per job saved. They state that this is a substantial cost per job saved, but caution that the finding is premature—noting that more time is needed before an accurate cost-benefit analysis on the PPP can be conducted. However, Hubbard and Strain (2020)<sup>80</sup> argue that the Autor et al. (2020) model is too narrow and excludes key variables such as “cost savings from reducing the demand for [unemployment] and safety net benefits.” Hubbard and Strain also note that the PPP’s goals extend beyond maintaining employment levels and assert that “cost per job saved” is not a sufficient metric to measure the success of the program. For example, cost per job saved does not take into account the economic benefits from avoiding the liquidation of a businesses’ fixed assets.

Another concern with the PPP is that the PPP loans may have failed to reach businesses that needed the support, and to have given support to businesses that did not need it. Both Chetty et. al (2020) and Granja et. al (2020) show that PPP funds did not flow to the districts and industries hardest hit by COVID-19. Bartik et. al (2020) note that PPP loan recipients were more likely to already have developed relationships with banks distributing PPP loans. These existing relationships allowed for rapid deployment of funds but decreased the ability of banks to target the flow of funds to businesses that lacked such relationships but were most in need.

In summary, the PPP appears to have had positive impact on eligible firms that received program funds. However, as noted by Chetty et. al (2020), Granja et. al (2020) and explained by Bartik et. al (2020), many firms that were in need failed to receive funds in part due to a lack of relationships with banks distributing PPP loans. SMEs will continue to need support as the COVID-19 crisis persists, and it will be pivotal that the firms most affected can gain access to the needed funds.

### *Main Street Lending Program*

On April 9, 2020, the Fed announced the creation of the Main Street Lending Program (“MSLP”) to enhance support for small and mid-sized businesses.<sup>81</sup> The structure and terms of

<sup>80</sup> Glenn Hubbard and Michael R. Strain, *Has the Paycheck Protection Program Succeeded?*, BROOKINGS(Sept. 23, 2020), <https://www.brookings.edu/bpea-articles/has-the-paycheck-protection-program-succeeded/>.

<sup>81</sup> FEDERAL RESERVE SYSTEM, *Press Release: Federal Reserve takes additional actions to provide up to \$2.3 trillion in loans to support the economy* (April 9, 2020), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm>.

the MSLP have been revised several times. The program currently operates through five loan facilities, three of which support lending to for-profit businesses (the Main Street New Loan Facility (“MSNLF”), Main Street Priority Loan Facility (“MSPLF”), and Main Street Expanded Loan Facility (“MSELF”)) and two for non-profit organizations (the Nonprofit Organization New Loan Facility (“NONLF”) and Nonprofit Organization Expanded Loan Facility (“NOELF”)).<sup>82</sup> Each facility is authorized under Section 13(3) of the Federal Reserve Act.<sup>83</sup>

Under the current structure, the FRBB lends to an SPV that purchases 95% participations in loans originated by eligible lenders.<sup>84</sup> The lenders assume credit risk by retaining 5% of these loans.<sup>85</sup> MSLP loans have five year terms; payments of principal are deferred for two years and interest payments are deferred for one year.<sup>86</sup> Eligible borrowers under each of the five facilities must satisfy specific criteria set forth in the applicable facility’s term sheet and provide certain certifications and covenants.<sup>87</sup> Under the MSLP’s current terms, loans extended through the program range from a minimum of \$100,000 (through the MSNLF, MSPLF, or NONLF) to a maximum of \$300 million (through the MSELF or NOELF).<sup>88</sup>

The MSLP can purchase up to \$600 billion in loan participations, though the Fed and Treasury may adjust the program’s size based on borrowers’ needs.<sup>89</sup> The Treasury is supporting the MSLP through a \$75 billion equity investment in the SPV, using funds appropriated to the ESF under the CARES Act.<sup>90</sup>

<sup>82</sup> FEDERAL RESERVE SYSTEM, *Policy Tools* (Dec. 11, 2020), <https://www.federalreserve.gov/monetarypolicy/mainstreetlending.htm>.

<sup>83</sup> See, e.g., FEDERAL RESERVE SYSTEM, *Periodic Report: Update on Outstanding Lending Facilities Authorized by the Board under Section 13(3) of the Federal Reserve Act* (Oct. 7, 2020), <https://www.federalreserve.gov/publications/files/pdff-mmlf-cpff-pmccf-smccf-talf-mlf-ppplf-msnlf-mself-msplf-nonlf-noelf-10-8-20.pdf#page=7>; FEDERAL RESERVE BANK OF BOSTON, *Main Street Lending Program For-Profit Businesses: Frequently Asked Questions* (Nov. 25, 2020), <https://www.bostonfed.org/mslp-faqs>; FEDERAL RESERVE BANK OF BOSTON, *Main Street for Nonprofit Organizations Part of the Main Street Lending Program: Frequently Asked Questions* (Nov. 25, 2020), <https://www.bostonfed.org/-/media/Documents/special-lending-facilities/mslp/legal/frequently-asked-questions-faqs-nonprofit.pdf>.

<sup>84</sup> FEDERAL RESERVE BANK OF BOSTON, *Main Street Lending Program For-Profit Businesses: Frequently Asked Questions* (Nov. 25, 2020), <https://www.bostonfed.org/mslp-faqs>; FEDERAL RESERVE BANK OF BOSTON, *Main Street for Nonprofit Organizations Part of the Main Street Lending Program: Frequently Asked Questions* (Nov. 25, 2020), <https://www.bostonfed.org/-/media/Documents/special-lending-facilities/mslp/legal/frequently-asked-questions-faqs-nonprofit.pdf>; FEDERAL RESERVE BANK OF BOSTON, *Fed’s Main Street Lending Program is now fully operational for loans to nonprofit organizations* (Sept. 4, 2020), <https://www.bostonfed.org/news-and-events/press-releases/2020/feds-main-street-lending-program-is-now-fully-operational-for-loans-to-nonprofit-organizations.aspx#:~:text=The%20Main%20Street%20Lending%20Program%20is%20designed%20to%20help%20credit,while%20the%20lender%20retains%205%25>.

<sup>85</sup> FEDERAL RESERVE BANK OF BOSTON, *Fed’s Main Street Lending Program is now fully operational for loans to nonprofit organizations* (Sept. 4, 2020), <https://www.bostonfed.org/news-and-events/press-releases/2020/feds-main-street-lending-program-is-now-fully-operational-for-loans-to-nonprofit-organizations.aspx#:~:text=The%20Main%20Street%20Lending%20Program%20is%20designed%20to%20help%20credit,while%20the%20lender%20retains%205%25>.

<sup>86</sup> *Id.*

<sup>87</sup> *Id.*

<sup>88</sup> FEDERAL RESERVE BANK OF BOSTON, *Main Street Lending Program For-Profit Businesses: Frequently Asked Questions* (Nov. 25, 2020), <https://www.bostonfed.org/mslp-faqs>; FEDERAL RESERVE BANK OF BOSTON, *Main Street for Nonprofit Organizations Part of the Main Street Lending Program: Frequently Asked Questions* (Nov. 25, 2020), <https://www.bostonfed.org/-/media/Documents/special-lending-facilities/mslp/legal/frequently-asked-questions-faqs-nonprofit.pdf>.

<sup>89</sup> *Id.*

<sup>90</sup> *Id.*

As shown in **Figure 18**, the program has had little uptake since it launched on June 15<sup>th</sup>, and the total purchased loan participations as of December 23, 2020 were \$14.5 billion, representing 1.7% of the program’s \$600 billion capacity.<sup>91</sup> One of the primary factors in this lack of utilization—relative to the program’s overall capacity—has been the Treasury’s unwillingness to bear credit risk with respect to its equity contribution to the MSLP (although the MSLP is operated by the Fed, the Treasury can influence its term through its approval requirement).<sup>92</sup> Secretary Mnuchin stated in April that “it’s pretty clear if Congress wanted me to lose all of the money, that money would have been designed as subsidies and grants as opposed to credit support.”<sup>93</sup> The Treasury’s reticence in this regard is reflected in the terms of the MSLP, including the requirements that eligible lenders to retain 5% of all loans and apply normal credit standards.

Figure 18: MSLP cumulative purchased loan participations as December 23, 2020 (\$B)



Source: Fed H.4.1 statistical release.

As of the end of November, 179 banks had extended a total of 646 MSLP loans. Of the 646 MSLP loans made by private banks, the MSPLF participated in 375, the MSNLF in 255, the MSELF in 13, and the NONLF in three. No loans have been extended through NOELF. As **Figure 19** demonstrates, average MSLP loan size was just under \$9.8 million, and loans ranged from \$232,000 to \$300 million. Loan interest rates, bound by the 3% plus Libor requirement, ranged between 3.13% and 3.31% and averaged 3.18%.<sup>94</sup>

<i>Loan element</i>	<i>Average</i>	<i>Low</i>	<i>High</i>
<i>Loan size</i>	\$9,789,176	\$232,690	\$300,000,000
<i>Interest rate</i>	3.18%	3.13%	3.31%

As mentioned, overall utilization of the MSLP has been very low.<sup>95</sup> And notably, a single bank from Florida—City National Bank of Florida (“**CNB**”)—has originated 198 of the 646 loans

<sup>91</sup> FEDERAL RESERVE SYSTEM, *Federal Reserve Statistical Release for the week ending December 23, 2020* (Dec. 28, 2020), <https://www.federalreserve.gov/releases/h41/current/h41.htm>.

<sup>92</sup> 12 U.S.C. § 343(3)(B)(i), (iv).

<sup>93</sup> Jeanna Smialek and Alan Rappeport, *Fear of Risk Could Diminish the Economic Rescue by the Treasury and Fed*, NEW YORK TIMES (May 18, 2020), <https://www.nytimes.com/2020/05/18/business/economy/economicstimulus-treasury-fed-risk.html>.

<sup>94</sup> FEDERAL RESERVE SYSTEM, *MSNLF Transaction-specific disclosures* (Dec. 11, 2020),

<sup>95</sup> *Id.*

made as of November 30.<sup>96</sup> While 165 of CNB’s 198 loans were issued to borrowers in Florida, the bank has also extended loans to businesses located as far away as California.<sup>97</sup> Vista Bank in Dallas, Texas has accounted for the second highest number of loans (36) and value of MSLP loans extended (\$436.2 million).

The Association for Corporate Growth reported that 81% of its members that attempted to secure an MSLP loan were unable to do so.<sup>98</sup> To better understand banks’ experiences with the MSLP, the Fed conducted a supplementary *Senior Loan Officer Opinion Survey on Bank Lending Practices* in September that focused exclusively on the MSLP.<sup>99</sup> The survey covered 86 US chartered banks<sup>100</sup> that were asked a range of questions regarding registration for the MSLP and the factors relevant to their decision to approve or reject MSLP loans.

Of the 86 banks surveyed, 18 had not registered for the program.<sup>101</sup> When asked why they had not registered, 94.1% cited their ability to address clients’ needs without the help of MSLP as either somewhat or very important in deciding not to register.<sup>102</sup>

Of the surveyed banks that had registered for the MSLP, 48 responded to questions on which MSLP loan terms they viewed as most restrictive for their clients.<sup>103</sup> **Figure 20** displays the results of the banks’ responses. Registered banks reported that they were reluctant to extend MSLP loans due to the loss-sharing provisions with the Fed in the event a borrower defaults, with 77.4% of respondents indicating it was either somewhat or very important in their decision to not approve MSLP loans. 87.3% of the banks responded that the debt-to-EBITDA stipulation was somewhat or very important in their decision to decline an MSLP loan. Required loan certifications and covenants were a key determinant for 80.7% of banks in their decision to not approve MSLP loans. Respondents also felt the amortization schedule was too steep for their clients, and 42.9% believed that the 5-year maturity term was too short.<sup>104</sup>

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<sup>96</sup> *Id.*

<sup>97</sup> *Id.*

<sup>98</sup> Thomas Bohn, *Testimony before the CARES Congressional Oversight Commission* (Aug. 7, 2020), <https://coc.senate.gov/sites/default/files/2020-08/BOHN%20Testimony%20COC%20Hearing%208-7.pdf>.

<sup>99</sup> Castro, Andrew, Quinn Danielson, Brandon Nedwek, and Andrei Zlate, *September 2020 Senior Loan Officer Opinion Survey on Bank Lending*, DIVISION OF MONETARY AFFAIRS, FEDERAL RESERVE SYSTEM (Sept. 29, 2020): <https://www.federalreserve.gov/data/documents/sloos-202009-fullreport.pdf>

<sup>100</sup> The banks were separated into two groups: 33 “large” banks with more than \$50 billion in assets and 53 “other” banks with less than \$50 billion. *Id.*

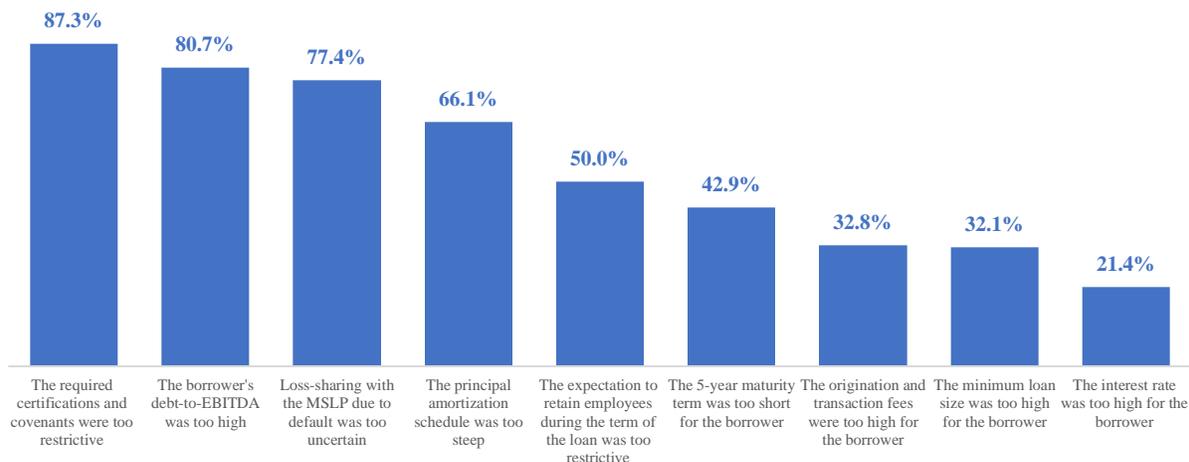
<sup>101</sup> *Id.*

<sup>102</sup> *Id.*

<sup>103</sup> *Id.*

<sup>104</sup> There were 35 respondents with less than \$50 billion of asset to the questions concerning the importance of amortization schedules and maturity terms. *Id.*

Figure 20: Net percentage of registered banks citing key terms of MSLP as reason for not approving MSLP loans, by MSLP term



Source: Fed, September 2020 Senior Loan Officer Opinion Survey on Bank Lending.

In summary, the MSLP has had minimal utilization, even as the credit conditions for SMEs have continued to deteriorate through the COVID-19 crisis. Initial feedback from the banks intended to extend these loans indicates that the structure of the program has played a role in its limited usage.

### *Ongoing Financial Challenges Facing SMEs*

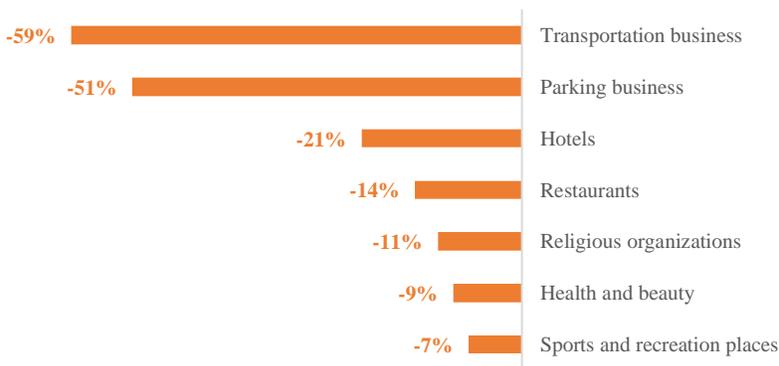
Despite these government efforts, SMEs are still facing headwinds brought on by the COVID-19 crisis. Although the Dun & Bradstreet Small Business Health Index has shown slight increases on a month-to-month basis between June and September, bringing the value of the index close to its pre-pandemic level, D&B believes the future outlook for small businesses remains lackluster.<sup>105</sup> According to Womply data, which uses the Small Business Association’s (“SBA”) industry-based revenue limits to define a small business,<sup>106</sup> the year-on-year change in revenue as of the beginning of October for small businesses remains negative. **Figure 21** demonstrates the effects for certain sectors. For example, transportation businesses were down -59% year-on-year, and small parking businesses were down 51% year-on-year as of October. Hotel and restaurant small businesses also continued to struggle into October as year-on-year change in revenues came in at -21% and -14%.<sup>107</sup>

<sup>105</sup> DUN & BRADSTREET, *U.S. Economic Health Tracker* (Nov. 2020), [https://www.dnb.com/content/dam/english/economic-and-industry-insight/DNB\\_Economic\\_Health\\_Tracker\\_November\\_2020.pdf](https://www.dnb.com/content/dam/english/economic-and-industry-insight/DNB_Economic_Health_Tracker_November_2020.pdf).

<sup>106</sup> U.S. SMALL BUSINESS ADMIN., *Table of Small Business Size Standards Matched to North American Industry Classification System Codes* (Aug. 19, 2019), [https://www.sba.gov/sites/default/files/2019-08/SBA%20Table%20of%20Size%20Standards\\_Effective%20Aug%202019,%202019\\_Rev.pdf](https://www.sba.gov/sites/default/files/2019-08/SBA%20Table%20of%20Size%20Standards_Effective%20Aug%202019,%202019_Rev.pdf).

<sup>107</sup> WOMPLY, *Data dashboard: How coronavirus / COVID-19 is impacting local business revenue across the U.S.* (last accessed Dec. 15, 2020), available at <https://www.womply.com/blog/data-dashboard-how-coronavirus-covid-19-is-impacting-local-business-revenue-across-the-u-s/>.

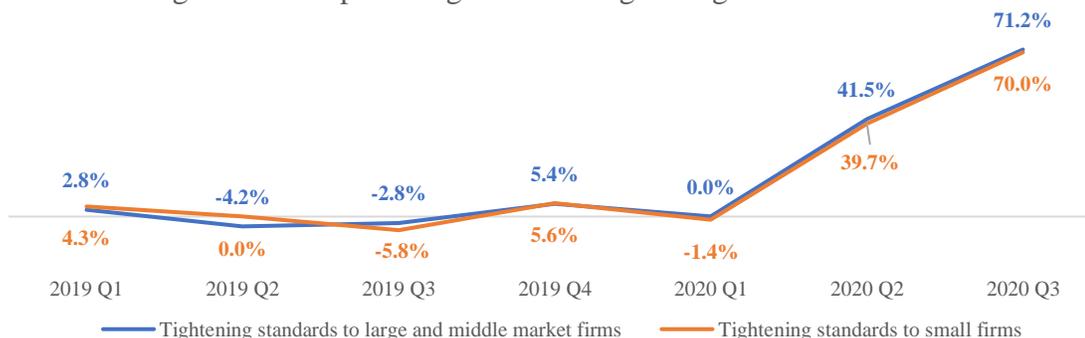
Figure 21: Year-on-Year percent change in SME revenue by sector



Source: Womply data as of October 1, 2020.

The Fed’s June 2020 *Senior Loan Officer Opinion Survey on Bank Lending Practices*, which surveys 80 large US banks and 24 US branches of large foreign banks, demonstrates that businesses of all sizes—including SMEs—are facing tighter credit conditions.<sup>108</sup> While the survey does not measure the severity of the tightening in credit conditions, the results show that the vast majority of banks tightened credit conditions throughout the COVID-19 crisis. As displayed in **Figure 22**, the net percentage<sup>109</sup> of surveyed banks reporting tightening lending standards to large or middle market firms increased to 71.2% in Q3, an approximately 30 percentage point jump from Q2.<sup>110</sup> Small firms face the same pressures, with a net 70.0% of surveyed banks reporting that they tightened conditions on loans extended to small firms.

Figure 22: Net percentage of banks tightening standards on loans



Source: Data from Fed July 2020 Senior Loan Officer Opinion Survey

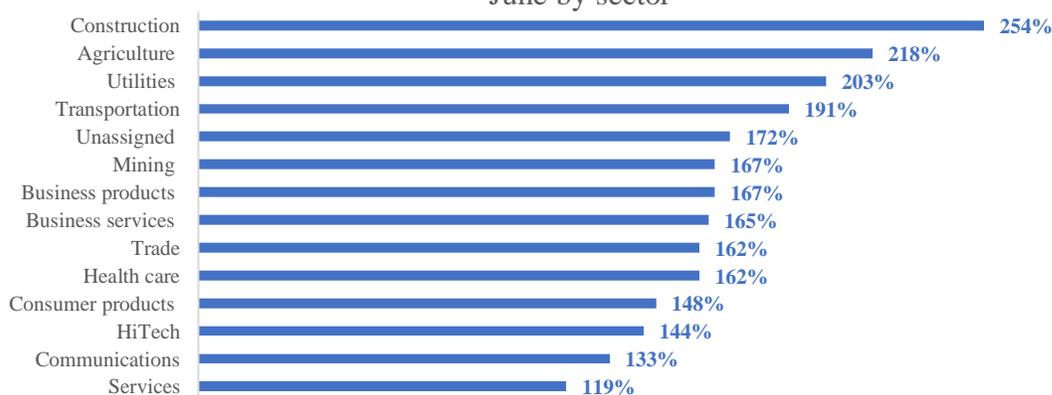
<sup>108</sup> FEDERAL RESERVE SYSTEM, *Senior Loan Officer Opinion Survey on Bank Lending Practices*, (August 3, 2020), <https://www.federalreserve.gov/data/sloos/sloos-202007-chart-data.htm>.

<sup>109</sup> For questions that ask about lending standards or terms, "net fraction" (or "net percentage") refers to the fraction of banks that reported having tightened ("tightened considerably" or "tightened somewhat") minus the fraction of banks that reported having eased ("eased considerably" or "eased somewhat").

<sup>110</sup> Large and middle-market firm category consists of firms with annual sales of \$50 million and small firm category consists of firms with less than \$50 million in sales.

The tightening of loan standards has coincided with an increase in predicted defaults for SMEs. A recent Moody’s Analytics analysis of the U.S. middle market measured the impact of COVID-19 on middle-market firms’ ability to meet debt obligations. Moody’s expected default frequency—which measures the probability of a company defaulting over a period of one year—increased in June across all sectors as a result of the COVID-19 crisis even when accounting for government interventions.<sup>111</sup> As **Figure 23** on the next page demonstrates, the construction industry witnessed the largest jump in average change in expected default frequency, increasing 254% from January to June. Agriculture and utilities experienced a 200%+ increase in their average change in expected default rates over the same period at 218% and 203%, respectively.

Figure 23: Avg change in expected default frequency from January to June by sector



Source: Moody’s Analytics, “COVID-19 Impact on the United States Middle Market Corporate Firm Credit Risk.” Data as of June 22, 2020.

### Conclusion

SMEs continue to face headwinds as the COVID-19 crisis persists, despite the government’s initial response. While research clearly indicates that the PPP had positive effects, it is also evident that funds did not reach certain of the areas and industries hardest hit by the pandemic. This outcome is partially a result of the PPP relying on banks to originate PPP loans. As the empirical literature demonstrates, banks provided rapid distribution of the loans, but this led to businesses with preexisting bank relationships accessing PPP funding more readily than those without such relationships. While this may represent a shortcoming of the program, it is not evidence of failure, given the absence of practicable alternatives to efficiently disburse the PPP funds. Now in its final days, the MSLP has experienced significant uptake relative to its previous usage—though still limited compared to its overall capacity. We find that despite the PPP and MSLP, SMEs continue to face economic headwinds and tight credit conditions.

<sup>111</sup> MOODY’S ANALYTICS, *COVID-19 Impact on United States Middle Market Corporate Firm Credit Risk* (July 17, 2020), [https://www.moodyanalytics.com/-/media/whitepaper/2020/Whitepaper\\_RiskCalc\\_USCorp\\_COVID\\_Analysis\\_July2020.pdf](https://www.moodyanalytics.com/-/media/whitepaper/2020/Whitepaper_RiskCalc_USCorp_COVID_Analysis_July2020.pdf).

### Part III: Conclusions and Recommendation

#### *State of CARES Act Lending Facilities*

On November 19, 2020, Treasury Secretary Mnuchin wrote to Chairman Powell indicating his intention to allow the emergency lending facilities that use CARES Act funds—the Corporate Credit Facilities, Term Asset Backed Liquidity Facility, Main Street Lending Program and the Municipal Liquidity Facilities—to expire on December 31, and requesting the return of all but \$25 billion of the CARES Act funds already contributed to those facilities. Secretary Mnuchin also asked that the Federal Reserve approve the extension of the non-CARES Act facilities—the Commercial Paper Funding Facility, the Money Market Mutual Fund Liquidity Facility, and the Primary Dealer Credit Facility—for an additional 90 days.<sup>112</sup> The Fed responded by extending the term of each of these facilities until March 31, 2021.

The Federal Reserve signaled its opposition to the termination of the CARES Act lending facilities at year end, noting that it would have preferred “that the full suite of emergency facilities established during the coronavirus pandemic continue to serve their important role as a backstop for our still-strained and vulnerable economy.”<sup>113</sup> Nonetheless, Chairman Powell indicated in his response to Secretary Mnuchin that the Fed would work with Treasury to arrange for the return of the unused portion of funds appropriated under the CARES Act to support Fed lending.<sup>114</sup>

We support the extension of the Primary Dealer Credit Facility, Money Market Mutual Fund Liquidity Facility, and Commercial Paper Funding Facility for another 90 days. Prior to their expiration at the end of the 90 days, the Fed and the new Treasury Secretary should re-evaluate their ongoing need based on the financial market situation and state of the COVID-19 crisis. We also agree with the Federal Reserve that it would have been preferable for the full suite of emergency facilities to remain operational through the beginning of the new year. We further note that while Secretary Mnuchin has the authority to terminate the facilities at any time, under his approval power in Section 13(3) of the Federal Reserve Act, in our view he was not compelled to do so by the CARES Act. The CARES Act only terminated the authority of the Treasury to make new loans, loan guarantees or investments after December 31, 2020. In our view, it did not set a time limit on the lending authority of emergency lending facilities already capitalized with CARES Act funds.

However, the new Coronavirus relief legislation terminates the authority of the existing Fed facilities with CARES Act backing to make new loans or purchase new assets after December 31, 2020 (or, in the case of the MSLP, January 8, 2021).<sup>115</sup> It also provides that the Exchange Stabilization Fund cannot be used to back any Fed program or facility that is the same as any

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<sup>112</sup> U.S. DEPT. OF TREASURY, *Letter from Secretary Mnuchin to Fed Chairman Powell* (Nov. 19, 2020), <https://home.treasury.gov/system/files/136/letter11192020.pdf>. Secretary Mnuchin also requested the extension, for 90 days, of the term of the Paycheck Protection Program Liquidity Facility, a facility established by the Federal Reserve to provide liquidity to financial institutions that lend to small businesses through the PPP. That facility was also extended by the Fed until March 31, 2021.

<sup>113</sup> James Politi and Colby Smith, *US Treasury refuses to extend some of Fed's crisis-fighting tools*, FINANCIAL TIMES (Nov. 19, 2020), <https://www.ft.com/content/e4b3a063-db44-4e6c-b998-74a29d70b136>.

<sup>114</sup> FEDERAL RESERVE SYSTEM, *Letter from Chairman Powell to Secretary Mnuchin* (Nov. 20, 2020), <https://www.federalreserve.gov/foia/files/mnuchin-letter-20201120.pdf>.

<sup>115</sup> *Consolidated Appropriations Act, 2021*, Division N, § 1005.

CARES Act program or facility, with the exception of TALF.<sup>116</sup> In addition, the new Coronavirus relief legislation rescinds most of the initial appropriation, in the CARES Act, of \$500 billion to the ESF to support direct loans and investments in Fed facilities: \$429 billion is rescinded immediately and any remaining unused amounts are rescinded on January 9, 2021.<sup>117</sup> Of the initial \$500 billion, only those amounts needed to cover losses on direct loans by Treasury and the commitments of the CARES Act facilities as of January 9, 2021, as well as to cover certain administrative and oversight expenses, remain appropriated.<sup>118</sup> Moreover, since the CARES Act facilities cannot make any new loans or purchase new assets, and they cannot be restructured, the CARES Act funds they retain to cover outstanding commitments—at least \$38 billion—cannot be repurposed.

*Ongoing Economic Impact of COVID-19*

Although the U.S. economy continues to improve, with economic output increasing and employers adding hundreds of thousands of workers every month, it is unlikely to return to its pre-pandemic level in the near term. Rather than pick up steam, the economy’s initially strong recovery in the late spring and early summer has been slowing. The National Activity Index published by the Federal Reserve Bank of Chicago, which incorporates data on consumption, employment and production, indicates that growth in November was the slowest it had been since the economy began to improve in May.<sup>119</sup> And the public health crisis is expected to continue in the coming months, with several states already reimplementing drastic restrictions on economic activity to control the pandemic.

Moreover, the impact of the COVID-19 pandemic has not been distributed evenly among companies and workers. The U.S. public equity market is buoyant, but that is not necessarily a sign that all is well for U.S. firms. Equity markets are dominated by large-capitalization firms, some of which—especially in the technology sector—remain strong in the face of public health restrictions instituted to control the pandemic. Sectors that have been hardest hit by the pandemic, such as department stores, airlines and travel services, make up a comparatively small fraction of the major market indices, while the vast majority of SMEs are not publicly traded at all.<sup>120</sup>

Likewise, although the unemployment rate has fallen from its April peak, long-term unemployment (those who have been unemployed for 27 weeks or more) continues to rise, increasing by 385,000 in November.<sup>121</sup> And the rate of workers filing for regular unemployment benefits on a weekly basis—not counting those filing additional pandemic-related unemployment benefits—continues to be more than three times the pre-pandemic level.<sup>122</sup> Moreover, lower-

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<sup>116</sup> Id.

<sup>117</sup> Id., § 1003.

<sup>118</sup> Id.

<sup>119</sup> FEDERAL RESERVE BANK OF CHICAGO, *Chicago Fed National Activity Index (CFNAI) Current Data* (Dec. 21, 2020), <https://www.chicagofed.org/research/data/cfnai/current-data>.

<sup>120</sup> Barry Ritholtz, *Why Markets Don't Seem to Care If the Economy Stinks*, BLOOMBERG OPINION (August 4, 2020), <https://www.bloomberg.com/opinion/articles/2020-08-04/why-markets-don-t-seem-to-care-if-the-economy-stinks?sref=2lCQoM0A>.

<sup>121</sup> U.S. BUREAU OF LABOR STATISTICS, *Employment Situation Summary*, USDL-20-2184 (Dec. , 2020), <https://www.bls.gov/news.release/laus.nr0.htm>.

<sup>122</sup> U.S. DEPT. OF LABOR, *News Release: Unemployment Insurance Weekly Claims* (Dec. 23, 2020), <https://www.dol.gov/ui/data.pdf>.

income workers have been disproportionately affected by the economic fallout of the pandemic. While many higher-income workers were able to transition to remote work, they represent a relatively small fraction of overall workers.<sup>123</sup> Meanwhile, job losses have been heavily concentrated in industries, such as leisure and hospitality, that have been hardest hit by the pandemic.<sup>124</sup>

*Need for Ongoing Support for SMEs*

Part II demonstrates that SMEs are continuing to experience significant declines in revenue, increased default rates and tighter credit conditions despite the PPP and MSLP.

We applaud the new \$284.45 billion appropriation for additional PPP loans, which will provide forgivable loans to small businesses with up to 500 employees, or up to 300 employees in the case of second-time PPP borrowers. The Coronavirus relief legislation also changes the terms on PPP loans to make them more helpful for smaller businesses, expanding the allowable uses of loan proceeds to include certain technology investments, supplier costs and investments in worker and customer safety related to COVID-19 and simplifying the forgiveness procedure for loans smaller than \$150,000.<sup>125</sup>

However, the limitations on the new round of PPP loans—especially on second-draw loans for borrowers that participated in the first round of PPP—will reduce its reach. And SMEs with more than 500 employees will have been largely left out of the government’s support programs due to an inability to access PPP and the onerous terms of the soon-to-be defunct MSLP.<sup>126</sup>

We therefore believe that Congress or the Fed and Treasury Department should consider creating a new lending program for SMEs that cannot access the PPP. However, there is no guarantee that such a new program would succeed in saving American small and medium-size businesses. After all, many businesses that could have been helped earlier have already gone out of business. But expanding the reach of government-backed lending to SMEs could give many remaining small and medium-size businesses that lack access to the PPP a fighting chance.

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<sup>123</sup> U.S. BUREAU OF LABOR STATISTICS, *Employment Situation Summary*, USDL-20-2184 (Dec. 4, 2020), <https://www.bls.gov/news.release/empsit.nr0.htm> (reporting that only 21% of employed persons teleworked because of the pandemic in October).

<sup>124</sup> U.S. BUREAU OF LABOR STATISTICS, *Current Employment Statistics – CES (National), Establishment Survey (CES) public data series* (last accessed Dec. 2020), <https://www.bls.gov/ces/>.

<sup>125</sup> *Consolidated Appropriations Act, 2021*, Division N, §§ 304, 307.

<sup>126</sup> NAICS Association, *Counts by Total Employees* (last accessed Dec. 2020), <https://www.naics.com/business-lists/counts-by-company-size/>.

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