

**THE FED**

**&**

**\$10.8T**

**a due diligence**

**U/AMMOPROFIT**





same conversations over and over because the math doesn't add up, and I haven't proved it out. Until now.

The discussions all boil down to, "The Fed announced their changes to the [various money supply measurements]," and we should believe the Fed.

[u/nomad80](#) was even kind enough to provide two links, below, to support his argument. This is the way to discuss these topics, and I applaud you, nomad, for providing the data to support your stance. And I thank you for encouraging me to prove my thoughts out. This was a fun rollercoaster.

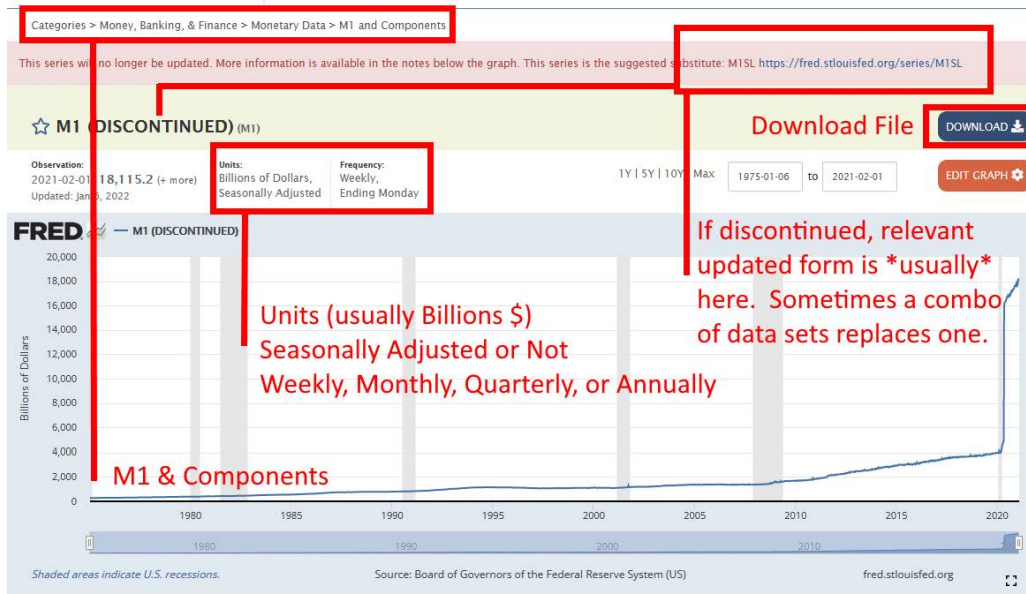
<https://fredblog.stlouisfed.org/2021/01/whats-behind-the-recent-surge-in-the-m1-money-supply/>

<https://fredblog.stlouisfed.org/2021/05/savings-are-now-more-liquid-and-part-of-m1-money/>

## I don't believe the Fed.

FRED is one of the best tools we have for looking at this data, and I'm specifically looking at the [M1 and Components](#) data. There are about 30 different spreadsheets.

Open the M1SL in a new tab: <https://fred.stlouisfed.org/series/M1>



### NOTES Super relevant information here. This is the recipe to make the dish.

**Source:** Board of Governors of the Federal Reserve System (US) **Release:** H.6 Money Stock Measures

**Units:** Billions of Dollars, Seasonally Adjusted

**Frequency:** Weekly, Ending Monday

**Changes**

This weekly series is discontinued and will no longer be updated. The non-seasonally adjusted version of this weekly series is **WHENS**, and the seasonally adjusted monthly series is **M1SL**.

Starting on February 23, 2021, the H.6 statistical release is now published at a monthly frequency and contains only monthly average data needed to construct the monetary aggregates. Weekly average, non-seasonally adjusted data will continue to be made available, while weekly average, seasonally adjusted data will no longer be provided. For further information about the changes to the H.6 Statistical Release, see the announcements provided by the source.

**Announcements**

Before May 2020, M1 consists of (1) currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions; (2) demand deposits at commercial banks (excluding those amounts held by depository institutions, the U.S. government, and foreign banks and official institutions) less cash items in the process of collection and Federal Reserve float; and (3) other checkable deposits (OCDs), consisting of negotiable order of withdrawal, or NOW, and automatic transfer service, or ATS, accounts at depository institutions, share draft accounts at credit unions, and demand deposits at thrift institutions.

Beginning May 2020, M1 consists of (1) currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions; (2) demand deposits at commercial banks (excluding those amounts held by depository institutions, the U.S. government, and foreign banks and official institutions) less cash items in the process of collection and Federal Reserve float; and (3) other liquid deposits, consisting of OCDs and savings deposits (including money market deposit accounts). Seasonally adjusted M1 is constructed by summing currency, demand deposits, and OCDs (before May 2020) or other liquid deposits (beginning May 2020), each seasonally adjusted separately.

For more information on the H.6 release changes and the regulatory amendment that led to the creation of the other liquid deposits component and its inclusion in the M1 monetary aggregate, see the H.6 announcements and Technical Q&As posted on December 17, 2020.

**Suggested Citation:**  
Board of Governors of the Federal Reserve System (US), M1 (DISCONTINUED) [M1], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/M1>, February 7, 2022.



The Categories at the top has the M1 and Components. I went through the entire category's data sets. We're looking at that relevant data sets from the M1 and Components category.

Below that is the red background that is one of three places that will indicate the data is deprecated. It may also say it in the bold beside the name, like "**M1 (DISCONTINUED)**", and if it doesn't say in either of those, you'll have to check the super relevant information at the bottom.

Units & Frequency information is relevant because you can get the data, depending on the file, in Weekly, Monthly, Quarterly, and/or Annual timeframes. On rare occasion, you can even get daily data. The files are usually Seasonally Adjusted in the Weekly frequencies OR not adjusted in the monthly, but you'll have to pay attention.

You can manually download the files in any number of formats using the big blue download button. The FRED also has an API, if you're so inclined.

And at the very bottom is the super relevant information with the breakdown information, deprecation information, and announcement information. Usually. There are a few that are basically empty, but they usually have all the pertinent information you could want.

## The Meat

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1			\$20,553.10							\$6,770.50			\$4,036.20				
2	Most Recent	\$20,553.10	\$6,951.60	\$2,007.70	\$4,827.10	\$4,832.10	\$13,601.50	\$13,231.60	\$576.30	\$1,390.70	\$4,803.50	\$3,387.80	\$348.50	\$299.90	\$7,335.40		
3	Row Labels	Sum of M1SL (bb)	Sum of CURRDD	Sum of CURRENCY	Sum of DEMDEPSL	Sum of WDDNS	Sum of MDLM	Sum of MDLNMW	Sum of OCDCBS	Sum of OCDSL	Sum of TCD	Sum of WDDSL	Sum of WOCDCS	Sum of WOCDSL	Sum of M1REAL	M1REAL/M1SL	
4	12/1/2021	\$20,553.10	\$6,951.60		\$4,827.10		\$13,601.50								\$7,335.40	35.69%	
5	11/1/2021	\$20,345.40	\$6,880.70		\$4,766.10	\$4,832.10	\$13,464.70	\$13,231.60							\$7,295.40	35.86%	
6	10/1/2021	\$20,082.90	\$6,747.10		\$4,641.70		\$13,335.80								\$7,257.40	36.14%	
7	9/1/2021	\$19,876.90	\$6,616.00		\$4,516.50		\$13,260.90								\$7,214.60	36.48%	
8	8/1/2021	\$19,696.70	\$6,581.30		\$4,487.80		\$13,115.40								\$7,132.80	36.63%	
9	7/1/2021	\$19,420.00	\$6,433.10		\$4,343.70		\$12,986.80								\$7,105.90	36.90%	
10	6/1/2021	\$19,255.70	\$6,293.30		\$4,213.90		\$12,962.50								\$7,152.80	37.24%	
11	5/1/2021	\$19,209.90	\$6,094.80		\$3,999.80		\$13,144.20								\$7,093.40	37.48%	
12	4/1/2021	\$18,927.50	\$5,816.30		\$3,765.60		\$13,111.20								\$7,050.60	37.77%	
13	3/1/2021	\$18,669.40	\$5,816.30		\$3,798.30	\$3,767.40	\$12,853.10	\$12,633.30							\$6,987.90	38.00%	
14	2/1/2021	\$18,389.50	\$5,685.40	\$2,007.70	\$3,678.50	\$3,636.30	\$12,704.10	\$12,496.10		\$4,803.50	\$3,387.80				\$6,902.70	38.13%	
15	1/1/2021	\$18,100.90	\$5,453.90		\$3,461.30		\$12,647.00		\$576.30	\$1,390.70					\$6,810.10	38.23%	
16	12/1/2020	\$17,812.40	\$5,287.50		\$3,318.20		\$12,524.80		\$555.40	\$1,330.80					\$6,741.00	38.32%	
17	11/1/2020	\$17,589.10	\$4,744.80		\$2,788.00		\$12,844.20		\$487.50	\$1,256.80					\$6,660.00	38.39%	
18	10/1/2020	\$17,346.80	\$4,362.60		\$2,418.50		\$12,984.20		\$429.10	\$1,182.10					\$6,595.00	38.44%	
19	9/1/2020	\$17,156.80	\$4,314.00		\$2,386.10		\$12,842.80		\$413.00	\$1,150.40					\$6,507.20	38.53%	
20	8/1/2020	\$16,887.00	\$4,173.00		\$2,261.90		\$12,734.00		\$481.90	\$1,195.60					\$6,486.30	38.67%	
21	7/1/2020	\$16,773.80	\$4,101.80		\$2,216.00		\$12,672.00		\$483.00	\$1,196.30					\$6,445.80	38.87%	
22	6/1/2020	\$16,583.80	\$4,033.60	\$1,835.40	\$2,177.00	\$2,292.00	\$12,550.20	\$12,200.30	\$469.20	\$1,146.50	\$3,183.30	\$2,098.70			\$6,333.80	39.07%	
23	5/1/2020	\$16,262.00	\$3,928.30		\$2,108.30		\$12,333.70		\$407.80	\$1,064.80					\$6,263.60	39.03%	
24	4/1/2020	\$4,774.40	\$3,787.60		\$2,006.00				\$372.70	\$986.80					\$6,169.50	38.76%	
25	3/1/2020	\$4,281.30	\$3,588.00		\$1,841.90				\$376.20	\$693.30					\$6,056.40	38.64%	
26	2/1/2020	\$4,028.40	\$3,351.90		\$1,627.70				\$367.60	\$676.40					\$5,953.70	38.66%	
27	1/1/2020	\$4,019.20	\$3,343.90		\$1,625.00				\$366.00	\$675.30					\$5,853.50	38.73%	
28	12/1/2019	\$4,011.20	\$3,336.80		\$1,627.10				\$367.50	\$674.40					\$5,753.50	38.76%	
29	11/1/2019	\$3,955.60	\$3,289.40		\$1,586.90				\$361.90	\$666.20					\$5,653.20	38.85%	
30	10/1/2019	\$3,926.10	\$3,253.80		\$1,561.20				\$363.80	\$672.30					\$5,553.50	38.88%	
31	9/1/2019	\$3,887.70	\$3,220.90		\$1,536.70				\$356.30	\$666.80					\$5,453.80	39.05%	
32	8/1/2019	\$3,844.00	\$3,184.50		\$1,510.40				\$356.80	\$669.50					\$5,354.10	39.07%	
33	7/1/2019	\$3,844.00	\$3,183.50	\$1,662.10	\$1,516.90	\$1,645.50			\$359.60	\$661.40	\$2,156.60	\$1,508.10	\$348.50	\$299.90	\$5,254.30	39.07%	
34	Grand Total	\$409,511.40	\$143,825.70	\$5,505.20	\$86,614.10	\$16,173.30	\$258,653.10	\$50,561.30	\$7,958.60	\$17,946.40	\$10,143.40	\$6,994.60	\$348.50	\$299.90	\$154,142.80	37.64%	
35			Currency & Deposits	Currency	Demand Deposits	Other Liquid Deposits	Other Checkable Deposits										
36					Weekly	Monthly	Weekly	Discontinued				Demand Deposits	Commercial Bank Other Checkable Depts	Other Checkable Depts at Thrift Institutions			CPI applied to M1SL
37					Seasonally Adj	Not Adjusted	Seasonally Adj	Not Adjusted									
38			0.00														
39																	
40	Date	M1SL (bb)	CURRDD	CURRENCY	DEMDEPSL	WDDNS	MDLM	MDLNMW	OCDCBS	OCDSL	TCD	WDDSL	WOCDCS	WOCDSL	M1REAL	M1REAL/M1SL	Deprecation
41	Most Recent	20,553.10	6,951.60	2,007.70	4,827.10	4,832.10	13,601.50	13,231.60	-	-	-	-	-	-	7,335.40	35.69%	After
42	2/1/2021	18,389.50	5,685.40	2,007.70	3,678.50	3,636.30	12,704.10	12,496.10	576.30	1,390.70	4,803.50	3,387.80	348.50	299.90	6,987.90	38.00%	Before
43		-10,806.70								6,770.50			4,036.20				

Because we're dealing with nested categories, this is going to be really, really fun. Like, fantastically claw your eyes out fun. So I've color coded the groupings for you, and I've trimmed out a lot of the fat, so we're dealing with 14 data sets instead of 33.

The data is pulled on different schedules, so your dates won't line up for easy comparison, but that's OK because we can fudge factor here. I mean, we're dealing in trillions. If we're off by  $\pm \$0.1T$ , we honestly don't care.

The column headers at the top are all **Sum of Whatever**, and you can add the whatever to the end of "<https://fred.stlouisfed.org/series/>" so Sum of M1SL becomes <https://fred.stlouisfed.org/series/M1SL>.

Column A are the dates, cleaned up.

Column B, **M1SL** is the light blue/grey. It's the grand total. That's what everything is supposed to add up into.

Columns C-H are the light orange/brown. They represent Currency & Deposits (Column C). Currency is Column D, and you can compare those metrics to CURRVALALL. You can also compare that data to summed totals of CURRVAL1, 2, 5, 10, 20, 50, and 100. (We'll come back to the 100's later.) Those datas all match up within 10B, which is incredibly accurate for a data set this large.

DEMDEPSL (Column E) and WDDNS (Column F) are your Weekly and Monthly Demand Deposits. You can pick either one of these, but not both.

MDLM (Column G) and MDLNWM (Column H) are your Other Liquid Deposits. You can pick either of these, but not both.

Column C (CURRDD) is also Column D (CURRENCY) + either Column E or F (DEMDEPSL or WDDNS).

$M1SL = CURRDD + MDLM$   
 $CoIB = CoC + CoG$

That gives us.... an *exact* match.

Which is great except we've got six other columns' worth of data (I-N), and those data sources stopped reporting in early 2020... We've got three flavors of Other Checkable Deposits, two more flavors of Other Checkable Deposits, and a Demand Deposits.

They total roughly \$10.8T. We'll come back to this.

The last two columns are the M1REAL. Remember when I said the description at the bottom had the super relevant information?

This series deflates M1 money stock (<https://fred.stlouisfed.org/series/M1SL>) with CPI (<https://fred.stlouisfed.org/series/CPIAUCSL>).

<https://fred.stlouisfed.org/series/CPIAUCSL>

**The Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL) is a measure of the average monthly change in the price for goods and services paid by urban consumers between any two time periods.** It can also represent the buying habits of urban consumers. **This particular index includes roughly 88 percent of the total population, accounting for wage earners, clerical workers, technical workers, self-employed, short-term workers, unemployed, retirees, and those not in the labor force.**

The CPIs are based on prices for food, clothing, shelter, and fuels; transportation fares; service fees (e.g., water and sewer service); and sales taxes. Prices are collected monthly from about 4,000 housing units and approximately 26,000 retail establishments across 87 urban areas. To calculate the index, price changes are averaged with weights representing their importance in the spending of the particular group. The index measures price changes (as a percent change) from a predetermined reference date. In addition to the original unadjusted index distributed, the Bureau of Labor Statistics also releases a seasonally adjusted index. The unadjusted series reflects all factors that may influence a change in prices. However, it can be very useful to look at the seasonally adjusted CPI, which removes the effects of seasonal changes, such as weather, school year, production cycles, and holidays.

**The CPI can be used to recognize periods of inflation and deflation. Significant increases in the CPI within a short time frame might indicate a period of inflation, and significant decreases in CPI within a short time frame might indicate a period of deflation.** However, because the CPI includes volatile food and oil prices, it might not be a reliable measure of inflationary and deflationary periods. For a more accurate detection, the core CPI (CPILFESL) is often used. When using the CPI, please note that it is not applicable to all consumers and should not be used to determine relative living costs. Additionally, the CPI is a statistical measure vulnerable to sampling error since it is based on a sample of prices and not the complete average.

Right now, the M1REAL says the actual value of the M1REAL is roughly 40% of the M1SL.

I'm not going to jump to conclusions and say a 1USD in our pocket is worth 40 cents compared to last year. But I do, still, strongly feel the measure of inflation is fucking *woefully* fucking inaccurate. But since a large portion of the money supply isn't, "cash in hand," money it's also worse, too.

Which leads me to the horizontal line between rows 13 and 14. This is the line of demarcation in the sand. It's when the Fed deprecated data AND roughly when the Fed implemented policies, so let's compare the before and after.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1			\$20,553.10							\$6,770.50			\$4,036.20				
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32	8/1/2019	\$3,844.00	\$3,184.50		\$1,510.40				\$356.80	\$659.50					\$1,500.90	39.05%	
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35			Currency & Deposits	Currency	Demand Deposits	Other Liquid Deposits	Other Checkable Deposits	Commercial Bank Other Checkable Deps at Thrift Institutions	Discontinued	Demand Deposits	Commercial Bank Other Checkable Deps at Thrift Institutions	Discontinued	CPI applied to M1SL				
36				Weekly	Monthly	Monthly	Weekly										
37				Seasonally Adj	Not Adjusted	Seasonally Adj	Not Adjusted										
38			0.00														
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41	Most Recent	20,553.10	6,951.60	2,007.70	4,827.10	4,832.10	13,601.50	13,231.60	-	-	-	-	-	-	7,335.40	35.69%	After
42	2/1/2021	18,389.50	5,685.40	2,007.70	3,678.50	3,636.30	12,704.10	12,496.10	576.30	1,390.70	4,803.50	3,387.80	348.50	299.90	6,987.90	38.00%	Before
43		-10,806.70								6,770.50			4,036.20				

At the bottom I have two more rows. Row 41 is the most recent data, and that data should match the top (Rows 1 and 2) for all active data sets. Row 42 is the latest data for any discontinued data set, and Feb 2nd data for all continued sets, so we're comparing roughly the same time frame. The data for February, March, and April are all pretty consistent for the continued data sets, so we're ok there.

When we check the recent data, it's accurate (same data and formula as before). When we check the discontinued data with continued data from the same time frame, we find the M1SL lacks \$10.8T. But we replaced M1 with M1SL, so surely this accounts for the discrepancy, right?



- M1, February 1st, 2021: \$18,115.20 (Billions)
- M1SL, February 1st, 2021: \$18,389.50 (Billions)

So what the fuck happened and why did all of our metrics go kerfloey?

## The Dessert

For that, I introduce you to Mr. Thomas Wade, Director of Financial Services Policy at the American Action Forum, who has graciously provided this wonderful list timeline of events to pore over and enjoy.

<https://www.americanactionforum.org/insight/timeline-the-federal-reserve-responds-to-the-threat-of-coronavirus/>

Holy. Fucking. Shit.

Mr. Wade lacked the WSOP tidbit about Nomura about the [Repo Loans in 2019 Q3](#).

But thanks to so many of you, we can read through these with a fresh set of eyes. I'm trimming these for the tastiest bits.

November 3, 2021 – Fed Announces that it will Reduce Pace of Asset Purchases

Eighteen months after initiating emergency actions that included slashing its key interest rate to zero percent, **the creation and revival of *nine* emergency lending facilities**, and an ambitious program of quantitative easing, the Fed has at last announced that it will begin to pull back on supporting the economy, with the first step a reduction in the rate of asset purchase through the quantitative easing program. **Until now the Fed has been buying in the region of \$120 billion in assets per month; under the new program the Fed will reduce this by \$15 billion per month with a view to completing exiting quantitative easing by the middle of 2022.**

1. Yes. NINE Facilities. We've identified three. Where are the other six?
2. \$120B/month was accurate at the time of writing the article. ~~We're up to, what, \$1.6T/day now?~~

Edit 1: Oops! \$1.6T/day is QE (printing money). The \$120B/month is QT (deleting money).

Edit 2: Same point. `~~Text~~` denotes markdown language for Strikethrough/strikeout. But editing a post with pictures requires editing in fancypants instead of markdown. So, this was corrected, but the editing was poor because fancypants. Fixed now.

March 15, 2020 – Quantitative Easing

In addition to cutting the federal funds rate to zero, the Fed also announced a new round of [Quantitative Easing], a controversial tool for boosting the economy **last employed in** any significant way as a result of the **2007 – 2008 financial crisis**. **Quantitative easing, also known as large scale asset purchases, typically involves a central bank itself purchasing government bonds or other long-term securities** in order to restore confidence and, crucially, add liquidity back into the market. The Fed announced that it would commence the QE program with an immediate \$80 billion buy (\$40 billion on Monday, \$40 billion on Tuesday) but would purchase “at least” \$700 billion in assets over the coming months with no limit.



Is this the reverse repo? And/or is it part of the other six unidentified repos/facilities?

Thankfully, Mr. Wade has graced us with some fed facilities that might be relevant.

Announcement Date	Operational Date or Proposed	Facility	Funded by CARES?	Acronym
March 17	April 14	Commercial Paper Funding Facility	No	CPFF
	March 20	Primary Dealer Credit Facility	No	PDCF
March 18	March 23	Money Market Mutual Fund Liquidity Facility	No	MMLF
March 23	June 29	Primary Market Corporate Credit Facility	\$50 Billion	PMCCF
	May 12	Secondary Market Corporate Credit Facility	\$25 Billion	SMCCF
	June 17	Term Asset-Backed Securities Loan Facility	\$10 Billion	TALF
April 9	April 16	Paycheck Protection Program Liquidity Facility	No	PPPLF
	June 15	Main Street Lending Program	\$75 Billion	
	May 26	Municipal Liquidity Facility	\$35 Billion	

#### March 15, 2020 – Encouraging Use of the Discount Window

One of the Fed's many roles in the economy is to act as lender of last resort. It does this by providing banks with what is called the "discount window," which banks can use as an emergency source of funding. Historically banks have been loath to use this facility, as it has previously signaled to the market that a bank is in extreme distress. Banks are, however, pushing back on this stigma with the Financial Services Forum, an advocacy forum representing U.S. banking giants, putting out a press release indicating that all its members would be using this facility. The Fed announced that it would encourage use of the discount window by lowering the primary credit rate 150 basis points, designed to encourage a more "active" use of the window.

"Uh huh." I think we're *starting* to have a pretty good idea why. We haven't figured it out yet. COVID happened at both an opportune and inopportune time for the banks because they were already facing a liquidity issue.

GME and the other meme stocks happened to fall into our lap at the same time.

Regardless, I don't believe the Fed. And I sure as hell don't believe the banks.

#### March 15, 2020 – Flexibility in Bank Capital Requirements

Modern banks are subject to a wide range of capital requirements, from total loss absorbing capacity (TLAC) to a variety of buffers, including countercyclical and buffers based on international size and prominence ([for more information on capital bank requirements, see here](#)). **These buffers are intended to act as emergency reserves that a bank can dip into in times of stress. The Fed announced on Sunday that it would support banks using these funds**, which normally are not considered accessible, to lend to households and businesses impacted by coronavirus, provided that lending occur in a safe and sound manner. For smaller lenders, the Fed also reduced reserve requirements to zero.

Read it: <https://www.americanactionforum.org/insight/bank-capital-requirements-a-primer/>

Now ask yourself how many banks tapped themselves out on bad bets? Or ask yourself [why the Senate took turns jerking off the banks while praising them about how big and strong they were](#) in May 2021, a year later?

March 15, 2020 – Coordinated International Action to Lower Pricing on U.S. Dollar Liquidity Swap Arrangements

The Fed, in coordination with the Bank of Canada, the Bank of England, **the Bank of Japan**, the European Central Bank, and the Swiss National Bank, announced a coordinated effort to lower pricing on standing U.S. dollar liquidity swap arrangements by 25 basis points, and to offer U.S. dollars with an 84-day maturity in addition to the usual weekly maturity. Both of these actions are designed to improve global liquidity of the U.S. dollar.

I mention the US Senate/Bankers because Japan handled this differently. or did they? [Nomura CEO Junko Nakagawa -> Bank of Japan](#). Which is weird because Archegos losses, while Nakagawa was ceo, [allegedly hit Nomura pretty hard](#) at \$2.9B.

March 17, 2020 – Creation of a Commercial Paper Funding Facility (CPFF)

Corporate, or commercial, paper is an unsecured, short-term financial instrument critical to business funding. On March 17, the Fed announced the creation of a new facility with the authority to buy corporate paper from issuers who might otherwise have difficulty selling the paper on the market, at a cost of the three-month overnight index swap rate plus 200 basis points. Treasury Secretary Steven Mnuchin noted in a press briefing that **the cost of this facility could be as high as \$1 trillion** but that he did not expect it to rise so high. **The Treasury will provide \$10 billion of credit protection to the Fed for the CPFF from the Treasury's Exchange Stabilization Fund.**

1. Here's one of the Facilities? That's 4.
2. What is the Treasury's Exchange Stabilization Fund?

March 17, 2020 – Creation of a Primary Dealer Credit Facility (PDCF)

In a related move, the Fed also announced that it would re-establish a facility offering collateralized loans to large broker-dealers. **The Fed will accept a wide range of permissible capital, including corporate paper**, in an attempt to encourage these investors to participate in the corporate paper market, and the market more generally.

1. Primary Dealer Credit Facility (PDCF) is Facilities #5.
2. What is corporate paper?

March 18, 2020 – Creation of a Money Market Mutual Fund Liquidity Facility (MMLF)

Similarly, the Fed also announced that it would establish a facility **offering collateralized loans to large banks who buy assets from money market mutual funds**. A money market mutual fund is a form of mutual fund that invests only in highly liquid instruments and as a result offers high liquidity with a low level of risk. Again, **the Fed will accept a wide range of permissible capital, including corporate paper**, in an attempt to encourage these investors to participate in the money market mutual fund market, and the market more generally.

1. Money Market Mutual Fund Liquidity Facility (MMLF) is Facility #6
2. What are the other permissible capitals?
3. [Corporate paper](#)

March 19, 2020 – U.S. Dollar Liquidity Swap Arrangements Extended to More International Central Banks

Currency swap arrangements, previously extended and modified with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank, expanded to include arrangements with the Reserve Bank of Australia, the Banco Central do Brasil, the Danmarks Nationalbank (Denmark), the Bank of Korea, the Banco de Mexico, the Norges Bank (Norway), the Reserve Bank of New Zealand, the Monetary Authority of Singapore, and the Sveriges Riksbank (Sweden).

Same thing as March 15th above, now extended to a bunch of other banks in other countries.

Since we know [the Fed bailed out Nomura Securities International, Inc. and Deutsche Bank Securities Inc. in 2019 Q3 \(and Q4\)](#), I'd expect the other banks in the list to show up sooner rather than later.

March 20, 2020 – Frequency of U.S. Dollar Liquidity Swap Operations Updated To Daily

The Fed, in coordination with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank, announced a coordinated effort to improve the liquidity of **U.S. dollar swaps** by **increasing the frequency of 7-day maturity operations from weekly to daily**.

If market volatility is a risk, and the market has a risk of declining, then the banks want to offload their risky swaps positions and/or moving assets outside of US purview? I need more coffee, but any SWAPS specialist should take a look.

March 20, 2020 – MMLF Will Now Accept Municipal Debt

The Money Market Mutual Fund Liquidity Facility (MMLF), in co-ordination with the Federal Reserve Bank of Boston, **expanded the list of acceptable collateral required for a loan to include high-quality municipal debt**.

1. Money Market Mutual Fund Liquidity Facility (MMLF) is Facility #7
2. "High-quality" municipal debt.

A municipal bond is a debt security issued by a state, municipality, or county to finance its capital expenditures, including the construction of highways, bridges, or schools. They can be thought of as loans that investors make to local governments. ... Municipal bonds also may be known as "muni bonds" or "munis."

Hey [u/arnott](#), didn't you write up a [DD about JPOW and MUNIS](#) yesterday?

We're a *fourth* of the way through the list and I've skipped *two* items. This is gold mine after gold mine.

## And now we get to March 23rd.

March 23, 2020 – Fed Announces Extensive New Measures To Support The Economy

In its most sweeping and dramatic intervention in the economy to date, the Fed announced a series of measures employing a wide range of the monetary policy authorities available to it, all with the aim to "support smooth market functioning". The Fed:

- Expanded its quantitative easing program (see March 15) to include purchases of commercial mortgage-backed securities in its **mortgage-backed security purchases**.
- **Established three new emergency lending facilities, a Primary Market Corporate Credit Facility (PMCCF) and a Secondary Market Corporate Credit Facility (SMCCF) to support credit to large employers, and a revival of the Term Asset-Backed Securities Loan Facility (TALF) to provide liquidity for outstanding corporate bonds.** These three programs will support up to \$300 billion in new financing options for firms, backed by the Treasury Department's Exchange Stabilization Fund (ESF) which will provide \$30 billion in equity to these facilities.
- **Expands the powers of two existing programs, the CPFF and PDCF** (see March 17 and 18). The **MMLF**, which already accepted a broad range of collateral including corporate paper, **will now cover a wider range of securities** i

– including municipal variable rate demand notes (VRDNs) and bank certificates of deposit. Similarly, the list of acceptable corporate paper that the CPFF would consider acceptable will now include high-quality, tax-exempt commercial paper as eligible securities. The Fed will also lower the price to use the CPFF facility.

– In addition, the Fed noted that it expects to announce shortly a fourth new program, to be called the **Main Street Business Lending Program**, designed to support small and medium-sized businesses. This program will support the work of the Small Business Administration (SBA).

For additional information on these developments, [see here](#).

Each of these could be an entire DD all on their own. Municipal Variable Rate Demand Notes (VRDNs) are the Munis.

[High-quality, tax-exempt commercial paper](#)? If these weren't acceptable before, why are they now? This smells like abusing a crisis for financial gain.

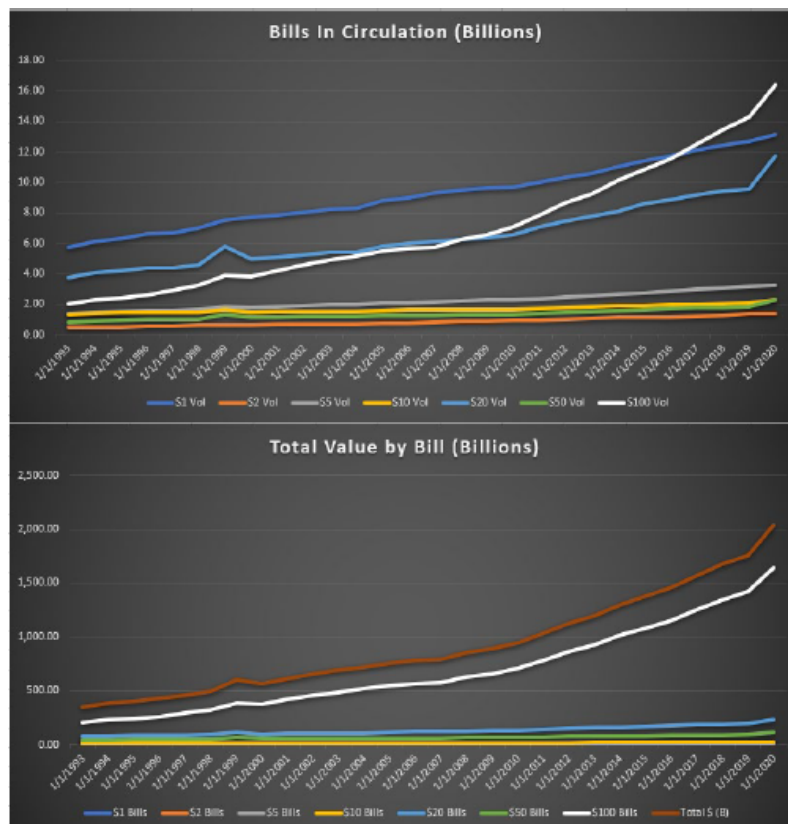
At this point, I've probably hit the limit. So I'm going to post the image again, now that you a little bit of an idea of all the broad, sweeping changes that occurred just after.

Maybe the \$10.8T shifted from M1 to M2. Maybe it got lost in the COVID shuffle. Maybe it's something more nefarious.

But until I find where it went, the math doesn't add up.

## Sprinkles

Oh, and remember when I said we'd come back to the \$100 bill data?



\$100 bills outnumber every other bill. And for some reason, their volume increased disproportionately beginning in 2007.

	Date	\$1 Vol	\$2 Vol	\$5 Vol	\$10 Vol	\$20 Vol	\$50 Vol	\$100 Vol
1	2020-01-01	13.10	1.35	3.22	2.25	11.75	2.28	16.37
2	2019-01-01	12.70	1.35	3.16	2.09	9.53	1.85	14.25
3	2018-01-01	12.40	1.25	3.06	2.01	9.43	1.78	13.44
4	2017-01-01	12.10	1.20	2.96	1.96	9.19	1.73	12.52
5	2016-01-01	11.70	1.15	2.84	1.92	8.86	1.67	11.55
6	2015-01-01	11.40	1.15	2.74	1.90	8.57	1.60	10.82
7	2014-01-01	11.00	1.10	2.62	1.89	8.11	1.54	10.15
8	2013-01-01	10.60	1.05	2.54	1.85	7.75	1.49	9.25
9	2012-01-01	10.30	1.00	2.44	1.77	7.45	1.45	8.63
10	2011-01-01	10.00	0.95	2.36	1.72	7.06	1.39	7.83
11	2010-01-01	9.70	0.90	2.30	1.66	6.53	1.34	7.05
12	2009-01-01	9.60	0.85	2.24	1.62	6.38	1.31	6.56
13	2008-01-01	9.50	0.85	2.20	1.63	6.26	1.29	6.25
14	2007-01-01	9.30	0.80	2.16	1.62	6.09	1.26	5.69
15	2006-01-01	9.00	0.75	2.10	1.60	5.96	1.26	5.64
16	2005-01-01	8.80	0.75	2.06	1.55	5.77	1.24	5.45
17	2004-01-01	8.30	0.70	1.96	1.51	5.38	1.21	5.17
18	2003-01-01	8.20	0.65	1.94	1.51	5.39	1.20	4.88
19	2002-01-01	8.00	0.65	1.88	1.49	5.19	1.17	4.59
20	2001-01-01	7.80	0.65	1.84	1.47	5.05	1.14	4.21
21	2000-01-01	7.70	0.60	1.78	1.45	4.93	1.10	3.78
22	1999-01-01	7.50	0.60	1.80	1.62	5.81	1.29	3.86
23	1998-01-01	7.00	0.60	1.60	1.43	4.55	1.01	3.20
24	1997-01-01	6.70	0.55	1.56	1.42	4.40	0.96	2.92
25	1996-01-01	6.60	0.55	1.56	1.43	4.36	0.97	2.61
26	1995-01-01	6.30	0.50	1.50	1.41	4.21	0.93	2.42
27	1994-01-01	6.10	0.50	1.46	1.38	4.03	0.88	2.29
28	1993-01-01	5.70	0.45	1.38	1.32	3.75	0.82	2.02

Sprinkles.

Edit 2: [u/oldmanRepo](#) was kind enough to clarify [the difference between a repo and facility in this thread](#). I've updated the language to reflect better terms. Thank you!!



