

Federal Reserve Timeline of Response to COVID-19

Date	Announcement	FFR (%)	Fed Balance Sheet (mln)	SPX	10yr UST (%)	IG OAS (bps)	Number of Confirmed Cases in the US	Size of Program (bln)	Relies on 13.3 (Exigent Clause) / Uses Treasury Capital / Works through an SPV	Treasury Capital Used** (bln)	Bank Regulatory Relief
3/3/2020	50bps rate cut	1.25	4,158,637	3003	1.00	133	106		N		N
3/15/2020	100bps rate cut Asset Purchase Program (500bln UST / 200bln Agency MBS) US Dollar Swap Lines with Foreign Central Banks (Lowered Cost and Increased Term) Cut Required Reserve ratio requirement Narrowed Discount Window rate by 50bps versus FFR	0.25	4,311,911	2386	0.72	240	3,487	Original Size: 700	N N N N N		N N N Y N
3/17/2020	Commercial Paper Funding Facility (CPFF) Primary Dealer Credit Facility (PDCF)	0.25	4,311,911	2529	1.08	256	5,837	100	Y Y	10	N N
3/18/2020	Money Market Liquidity Facility (MMLF)	0.25	4,668,212	2398	1.19	287	8,287	100	Y	10	Y
3/19/2020	Increased Foreign Central Bank participation in US Dollar Swap Lines	0.25	4,668,212	2409	1.14	325	12,241		N		N
3/20/2020	Increase Frequency of US Dollar Swap Lines operations with Foreign Central Banks MMLF expands to short-dated municipals	0.25	4,668,212	2305	0.85	351	17,589		N Y		N Y
3/23/2020	Size of Asset Purchase Program Amended to be open-ended Expand Asset Purchase Program to include Agency CMBS Primary Market Corporate Credit Facility (PMCCF) Secondary Market Corporate Credit Facility (SMCCF) Term Asset-Backed Loan Facility (TALF) Expand eligibility of MMLF to Bank CDs and VRDNs Reduce Pricing on CPFF Announced Main Street Lending Program (MSLP)	0.25	4,668,212	2237	0.79	357	43,847	Unlimited Original Size: 100 Original Size: 100 100	N N Y Y Y N N		N N N 10 10 10 N N N
3/31/2020	Foreign and International Monetary Authorities (FIMA) Repo Facility	0.25	5,254,278	2585	0.67	271	188,172		N		N
4/1/2020	Exclusion of Treasuries & Reserves within Supplementary Leverage Ratio (SLR)	0.25	5,811,607	2471	0.58	279	216,515		N		Y
4/6/2020	Financing Facility backed by PPP Loans (PPPLF) – Updated on 4/9/2020 for favorable regulatory treatment	0.25	5,811,607	2664	0.67	256	368,196		Y		Y
4/9/2020	Municipal Liquidity Facility (MLF) Increase the Size of the PMCCF and SMCCF and expand eligibility to fallen angles (IG as of 3/22/20) and HY ETFs Established Main Street New Loan and Expanded Loan Facility (MSNLF & MSELF) under previously announced MSLP on March 23rd Expand eligibility of TALF to non-Agency AAA CMBS and AAA CLOs	0.25	6,083,141	2815	0.75	228	432,438	500 750 total for 2 programs 600	Y Y Y	35 75 75	N N N
4/27/2020	Expand the Scope and Duration of the MLF	0.25	6,573,136	2878	0.66	197	983,848	500 (unchanged)	Y	35 (unchanged)	N
4/30/2020	Expand Scope and Eligibility of MSLPs (Main Street New Loan, Priority Loan and Expanded Loan Facilities) Expand Access to PPPLF to additional lenders and collateral	0.25	6,655,929	2927	0.60	194	1,040,608	600 (unchanged) 650 (upsized post legislation)	Y Y	75 (unchanged)	N Y
5/5/2020	Relief on LCR for MMLF and PPPLF Bank Participants	0.25	6,655,929	2879	0.64	197	1,194,494				Y
5/12/2020	First ETF purchases in the SMCCF	0.25	6,934,227	2870	0.67	205	1,369,574	750 (unchanged)	Y	75 (unchanged)	N
6/3/2020	Expansion of the Scope of the MLF	0.25	7,097,316	3114	0.76	161	1,835,681	500 (unchanged)	Y	35 (unchanged)	N
6/8/2020	Adjust Lending Terms to Expand Use of the Main Street Lending Programs	0.25	7,165,217	3232	0.88	144	1,954,236	600 (unchanged)	Y	75 (unchanged)	N
6/10/2020	Maintain Open-Ended QE at Pace of 80bln Treasuries per Month / 40bln Net (~90bln gross) Agency MBS per month	0.25	7,168,936	3190	0.73	150	2,000,464	Unlimited (unchanged)	N		N
6/15/2020	Expand SMCCF to Purchases of Broad and Diversified Portfolio of IG Corporate Bonds	0.25	7,168,936	3069	0.71	158	2,102,765	750bln (unchanged)	Y	75 (unchanged)	N
6/29/2020	New Term Sheet Released for PMCCF indicating Operational Readiness	0.25	7,082,302	3045	0.64	153	2,562,921	750bln (unchanged)	Y	75 (unchanged)	N
7/17/2020	Modification to MSLP eligibility for nonprofits	0.25	6,958,604	3225	0.63	135	3,647,237	600 (unchanged)	Y	75 (unchanged)	N
7/28/2020	Lending Facility Extension through December 31 (PDCF, MMLF, PMCCF, SMCCF, TALF, PPPLF, MSLF, MLF, CPFF)	0.25	6,964,755	3236	0.58	132	4,296,461				
8/27/2020	Introduction of Flexible Average Inflation Targeting within Statement on Longer Run Goals and Monetary Policy Strategy	0.25	6,990,418	3485	0.75	130	5,866,053				
9/16/2020	Introduction of new forward guidance (three criteria) to maintain the FFR at the ZLB	0/25	7,064,475	3385	0.70	128	6,629,880				
10/30/2020	Term adjustment to MSLP by reducing minimum loan size	0.25	7,146,306	3247	0.85	127	8,950,742	600 (unchanged)	Y	75 (unchanged)	N
11/30/2020	Extend Select Facilities Through March 31st 2021: CPFF, MMLF, PDCF, PPPLF	0.25	7,216,480	3612	0.85	107	13,389,786				
12/31/2020	Expected Expiration of Select Facilities on December 31st, 2020: PMCCF, SMCCF, TALF, MSLF, MLF										

Source: Bloomberg, Federal Reserve, JPM Asset Management; As of 11/30/2020