

Cavalan Hill Fixed Income Insights

2nd Quarter, 2020

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What Keeps Us Up At Night?

The large increase in unemployment has led to a spike in loan delinquencies, particularly in mortgage, auto, and consumer loans. Many securities backed by these loans have already experienced significant price declines. It is likely many securities believed to be of high quality will ultimately experience ratings downgrades and principal losses.

After a volatile first quarter in the corporate market, the Fed effectively put a floor under corporate bonds with their pledge to purchase up to \$250 billion investment grade corporate bonds through September 2020. This aggressive buying program may bring spreads down to unexpectedly low levels.

The Federal Reserve is expected to keep the target Fed Funds rate at 0-0.25% through at least the end of 2022, and perhaps longer.





What Keeps Us Up At Night?

The municipal market has endured numerous credit cycles, but the economic shut-down caused by COVID-19 is unprecedented. Our concern is the economic ramifications will have a long term impact on issuers.

Oil prices have rebounded sharply from the precipitous drop in April, but given the economic uncertainty surrounding COVID-19, it remains to be seen whether it's temporary or sustainable.



Fixed Income Returns (as of 6/30/20)

	1 Month	3 Month	1 Year
BB Aggregate Index	0.63%	2.90%	8.74%
BB Intermediate Aggregate Index	0.41%	2.13%	6.60%
BB Municipal Index	0.82%	2.72%	4.45%
BB Treasury Index	0.09%	0.48%	8.71%
BB Agency Debentures Index	0.30%	2.02%	4.67%
BB Corporate Index	1.96%	8.98%	9.50%
BB Agency MBS Index	-0.09%	0.67%	5.67%
BB High Yield Index	0.98%	10.18%	0.03%

Source: Bloomberg Barclays Indices



Key Rates

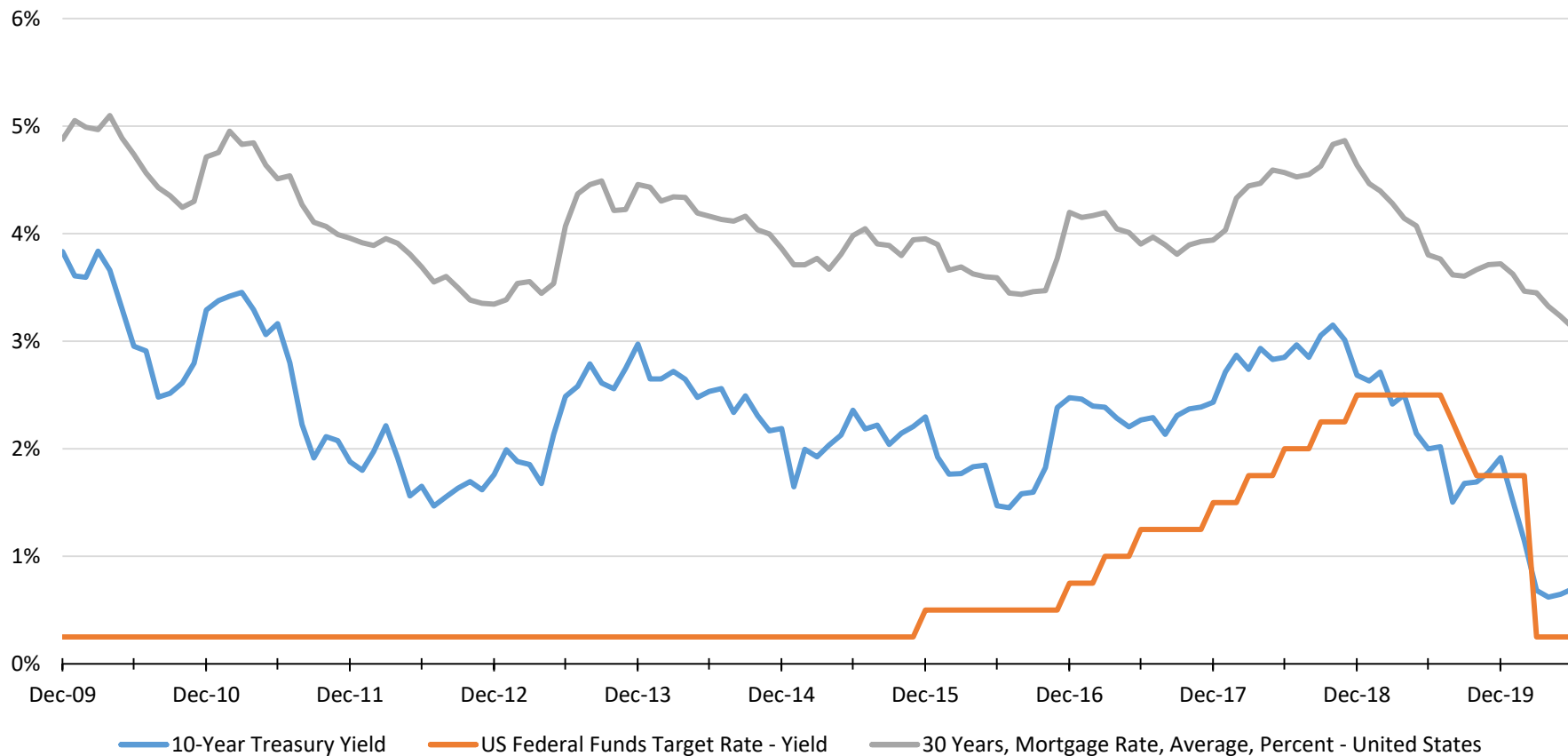
	6/30/20	3/31/20	1 Month Bps Change	3 Month Bps Change	1 Year Bps Change
2 Year Treasury Note	0.15%	0.25%	-1	-10	-161
10 Year Treasury Note	0.66%	0.67%	+1	-1	-135
10 Year TIPS	-0.71%	-0.26%	-20	-45	-101
2 Year MMD AAA	0.39%	1.27%	+2	-88	-96
10 Year MMD AAA	1.26%	1.62%	-3	-36	-57
Fed Funds Rate	0.25%	0-0.25%	0	0	-225
3 Month LIBOR	0.30%	1.45%	-5	-115	-202
30yr Mortgage Rate	3.27%	3.86%	-25	-59	-53

Source: Bloomberg



U.S. Key Interest Rates

The target Fed Funds rate is expected to remain at 0% through at least 2022. The 10-year note is hovering at the lowest yields ever recorded, and the 30-year mortgage rate continues to decline.



Source : Tullett Prebon Information, JP Morgan Chase, FactSet. As of 06/18/2020.



Global 10 Year Yields

US 10yr Treasury yields remain well below 1%, while Eurobond and Japanese yields remain at or below 0%. China's 10yr rate has moved back up to near 3%.



Source : Tullett Prebon Information, JP Morgan Chase, FactSet. As of 06/18/2020.



GDP Forecasts

Economic forecasting has become extremely difficult due to the coronavirus. As shown below, the 2nd quarter contraction is expected to be historic; the key question is how quick and robust will the rebound be?

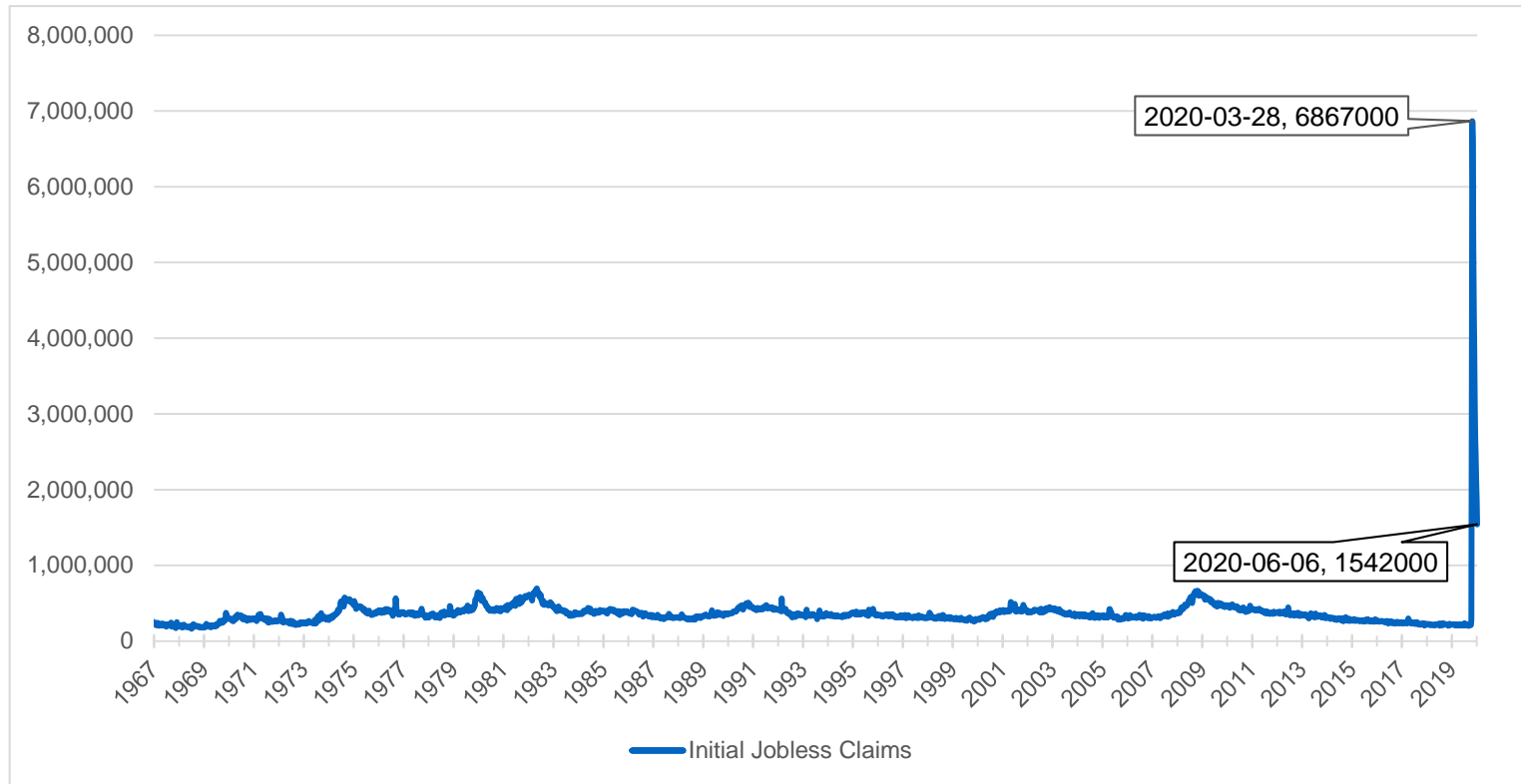
GDP FORECASTS		
	Q2	Q3
Bank of America Merrill Lynch	-40.0%	7.0%
Barclays	-40.0%	25.0%
Bloomberg Economics	-36.7%	16.2%
BMO Capital	-40.0%	36.0%
Citigroup	-28.1%	23.2%
Goldman Sachs	-36.0%	29.0%
JPMorgan Chase	-40.0%	23.0%
Moody's Economy.com	-33.4%	19.8%
RBC Capital Markets	-35.0%	45.0%
Societe Generale	-30.5%	15.4%
UBS	-39.8%	8.1%
Wells Fargo	-37.6%	23.9%

Source: Bloomberg



Jobless Claims

Though jobless claims have fallen substantially from their peak in late March, the weekly number of claimants is still far above any level witnessed in the series' history.

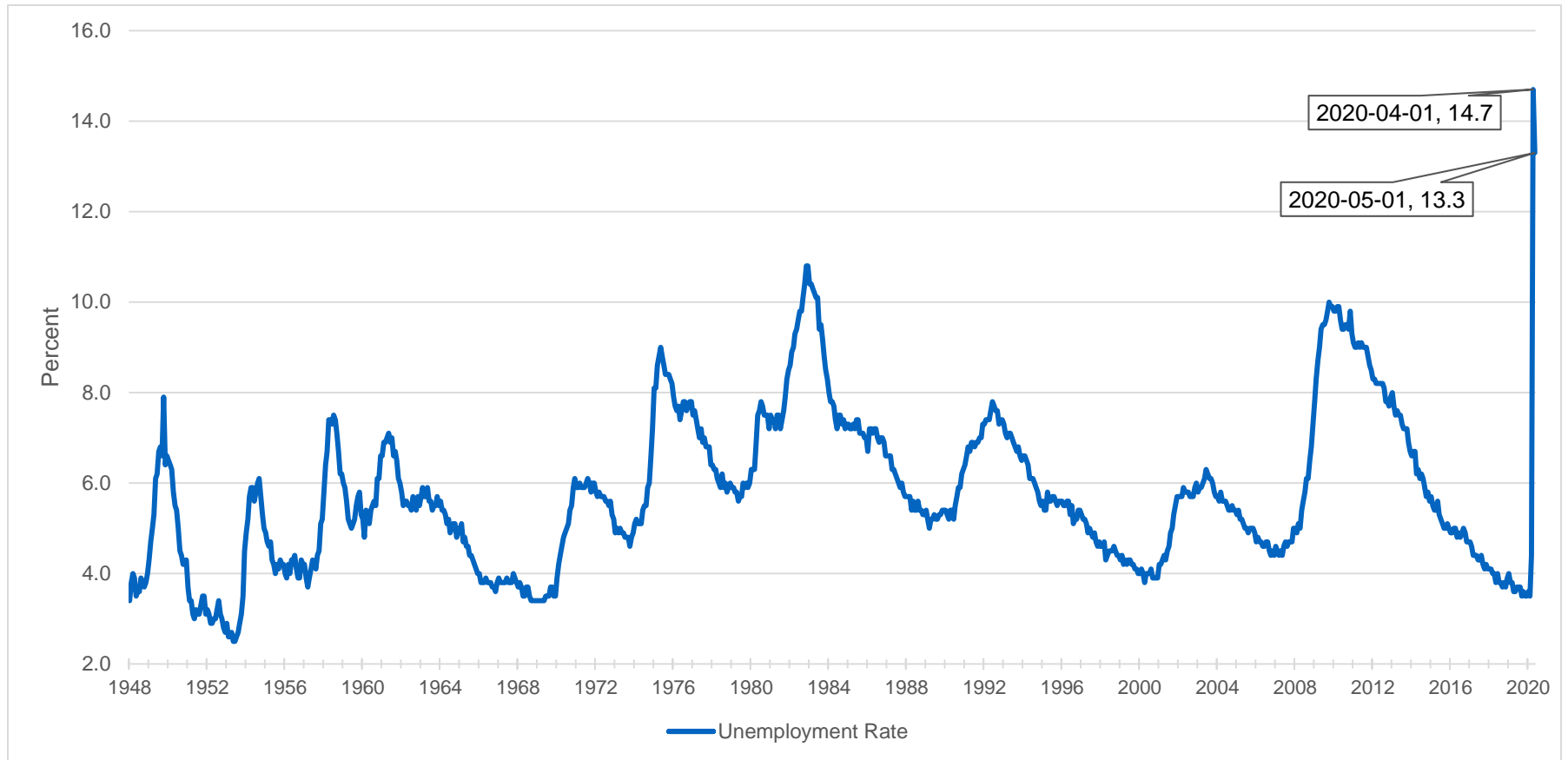


Source: <https://fred.stlouisfed.org>



Unemployment Rate

The unemployment rate is higher than it has ever been during the career of any current investment professional. Economic and/or market models that rely on historical data are likely to be of little use given the unprecedented nature of the current environment.

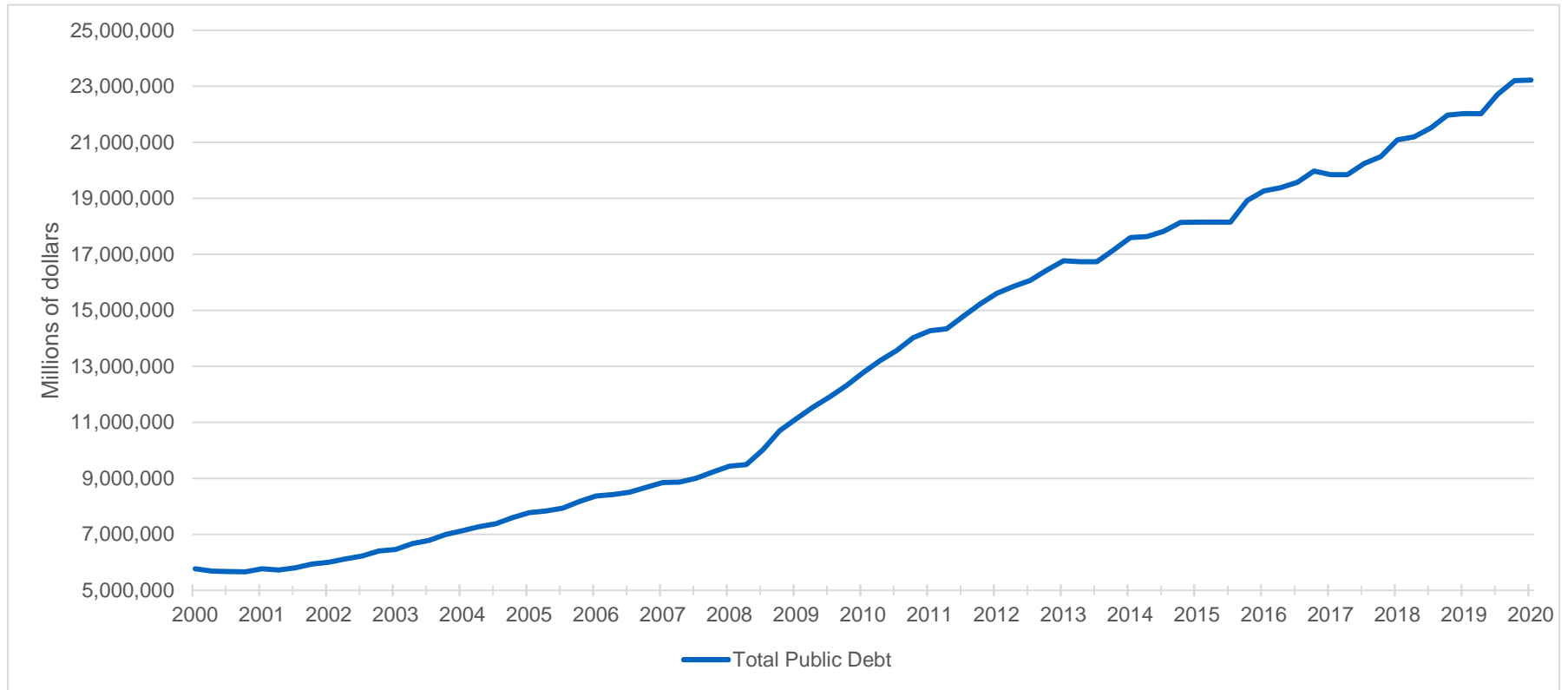


Source: <https://fred.stlouisfed.org>



National Debt

The national debt ended the first quarter at around \$23 trillion. With the fiscal stimulus enacted to combat the current crisis, that figure will likely move above \$26 trillion this year. To the extent that rising debt levels hamper future growth potential, the trend US economic growth rate has likely declined by some factor.

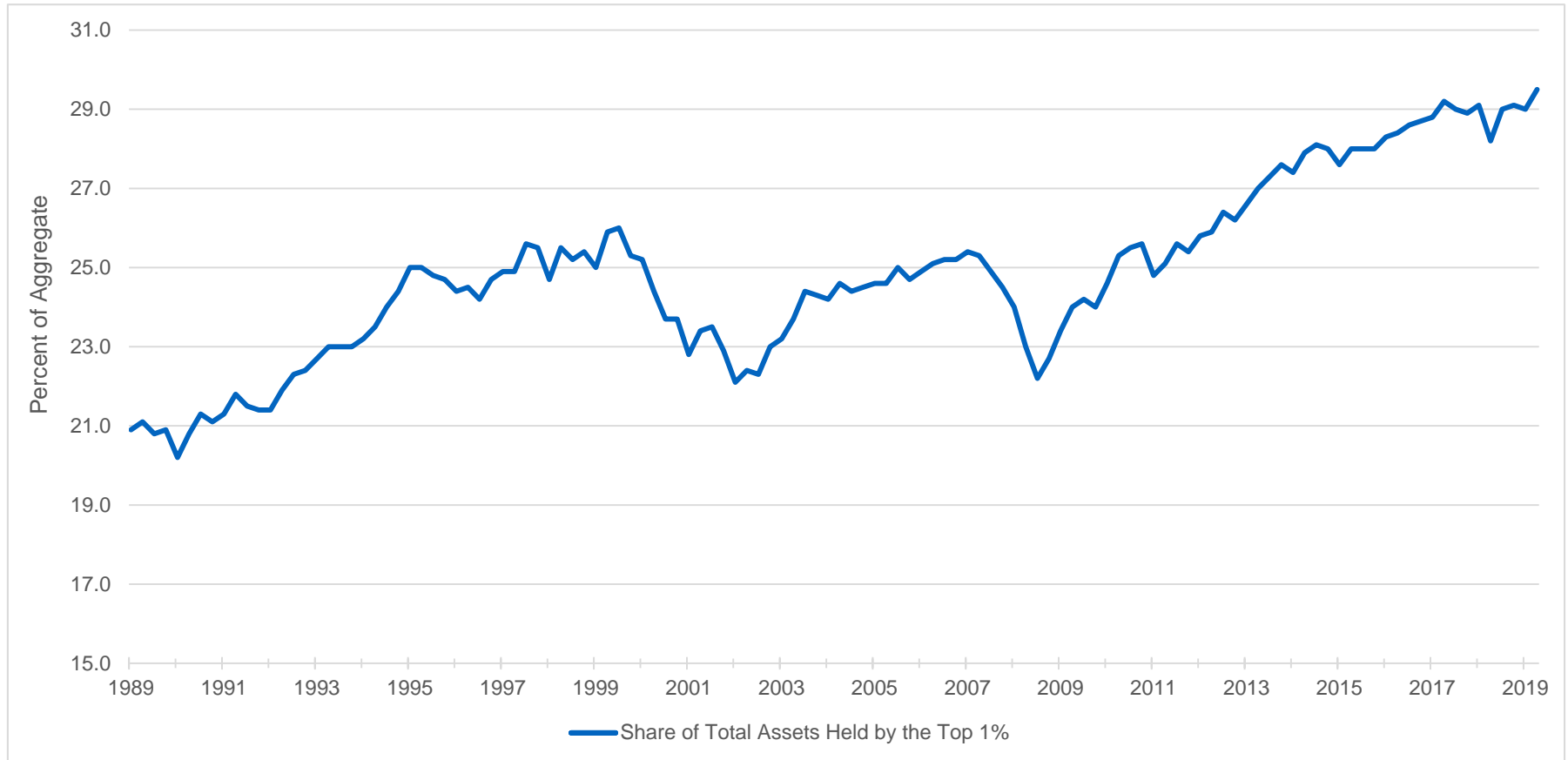


Source: <https://fred.stlouisfed.org>



Wealth Inequality

Prior to the current crisis, wealth inequality was already high and rising. Given that the Federal Reserve's tools are aimed at supporting asset prices, the Fed's response to this crisis will lead to an even faster pace of increasing wealth inequality.

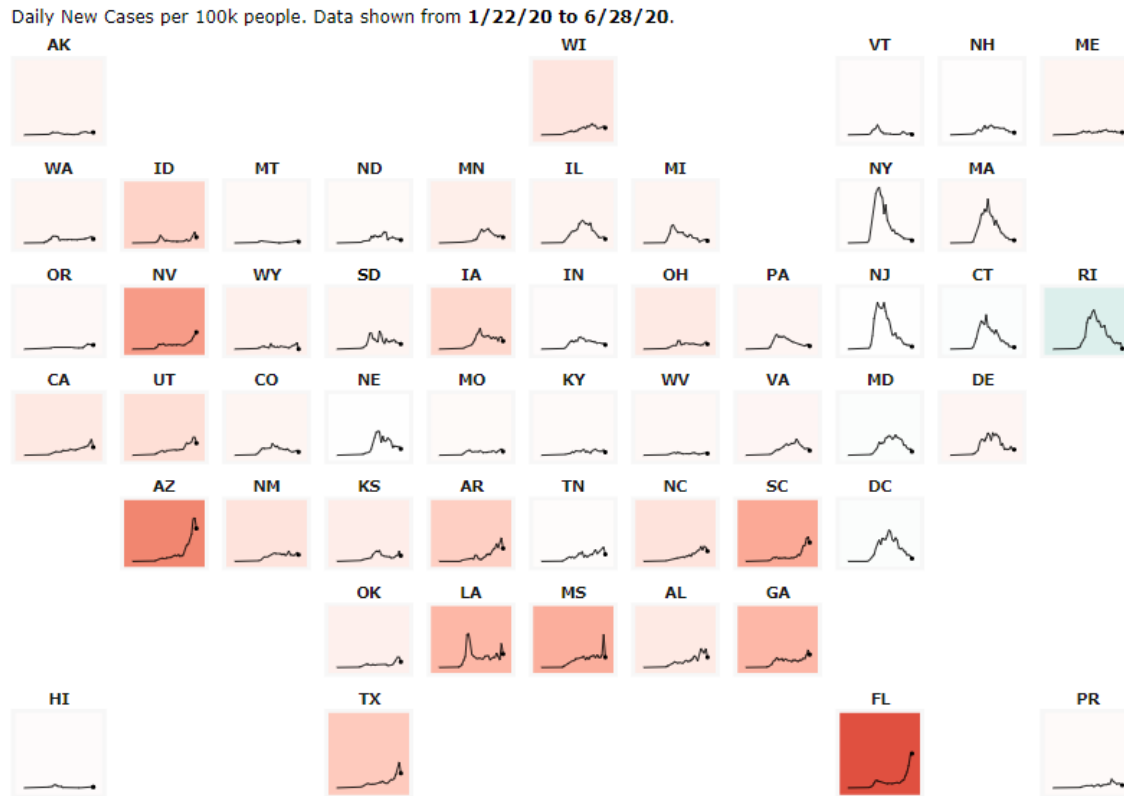


Source: <https://fred.stlouisfed.org>



Relaxed restrictions threaten full reopening of economy

Cases of COVID-19 are starting to accelerate in southern and mid-western states as the northeast recovers. Increasing rates of infection may slow or reverse economic reopening, threatening governments' economically sensitive revenues.



Source: Johns Hopkins University



Taxable Fixed Income



Investment Grade Corporate Spreads

Corporate spreads, after spiking in the first quarter, have largely retraced their widening. Spreads are now only 20-30bps above their historical average and roughly 50bps above all time tightest levels.

US Corporate Investment Grade Average OAS



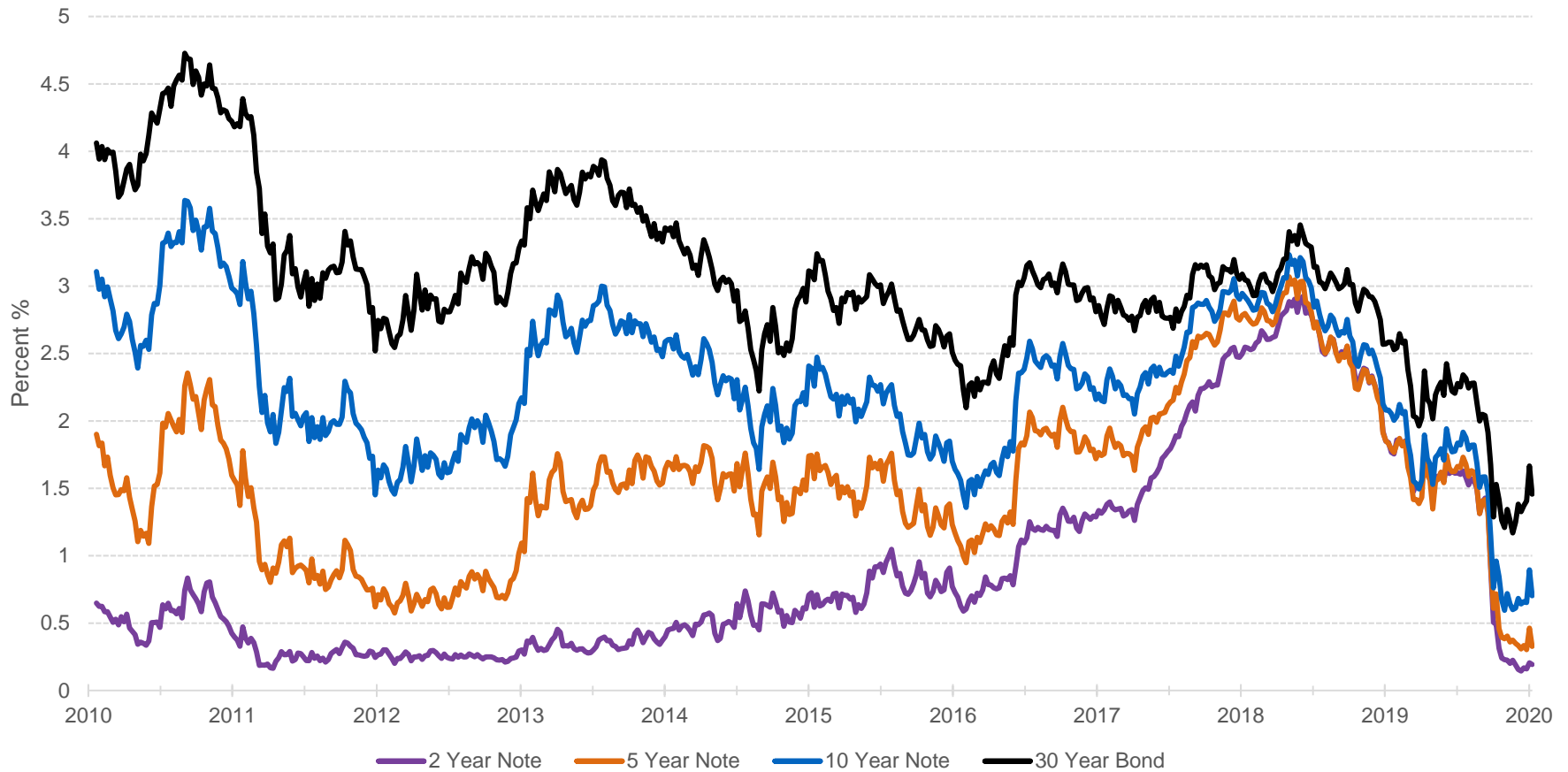
Source: Bloomberg



Treasury Yields over Time

The Treasury yield curve has steepened significantly since the beginning of the year. However, yields across the curve remain at or near all time lows.

Rate History



Source: Bloomberg, as of 06/19/2020.



10 Year Treasury Yield Minus 2 Year Treasury Yield

The yield curve was in a flattening trend for 6 years. In recent months, as the Fed has cut the target Fed Funds rate back to 0%, the curve has begun to steepen again. We believe this trend will continue in the coming months as the economy recovers.

2Y10Y Slope



Source: Bloomberg, as of 06/19/2020.



Yield by Credit Rating

Yields have plummeted in the 2nd quarter as markets recovered. While AAA yields are at record lows below 1%, the spread between AAA and other ratings is relatively large and absolute yields are at/near record lows for all other investment grade credit ratings.



Source: Bloomberg Barclays Indices



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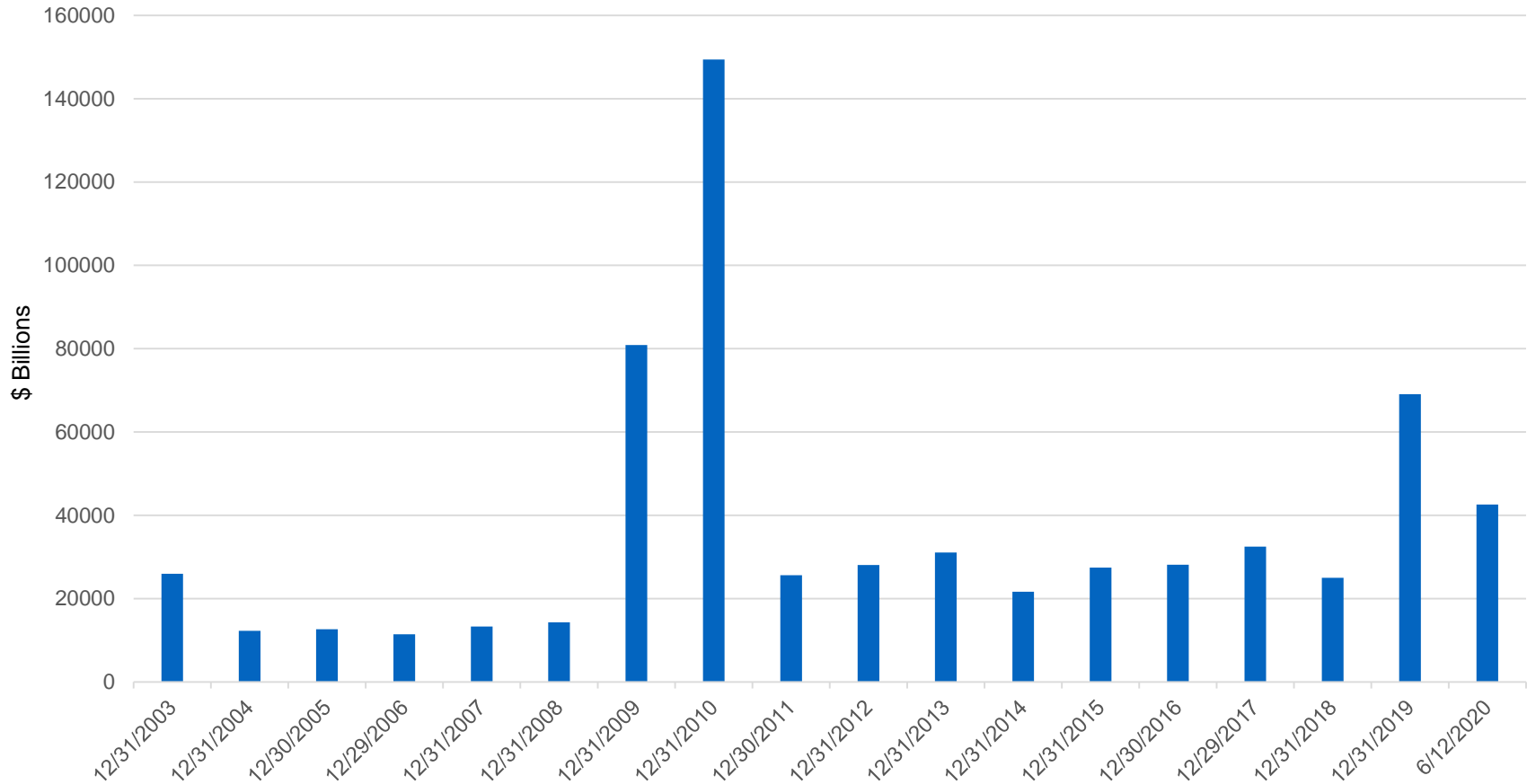
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Taxable Municipal Issuance

With the exception of the Build America Bond program in 2010, this year is tracking to be the largest issuance of taxable municipal debt in history. Driving the increase in issuance the past two years is a change in tax laws requiring refunded tax-exempt debt to be taxable, and with rates very low, it still makes sense to refinance the debt.



Source: Bloomberg



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Taxable Municipal vs IG Corporate Yields

IG Corporate Yields, despite the lower general overall credit quality, generally yield less than taxable municipals. The excess yield for purchasing taxable municipals is at the highest point in the last five years.



Source: Bloomberg Barclays Indices



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High Yield Corporate Spreads

High Yield spreads have retraced most of the widening experienced in the first quarter. This is due to the Fed pledging to buy some high yield debt through ETF purchases, and some of the riskiest names declaring bankruptcy, such as JC Penney, Neiman Marcus, and multiple energy companies, thus falling out of the index.

US Corporate High Yield Average OAS



Source: Bloomberg



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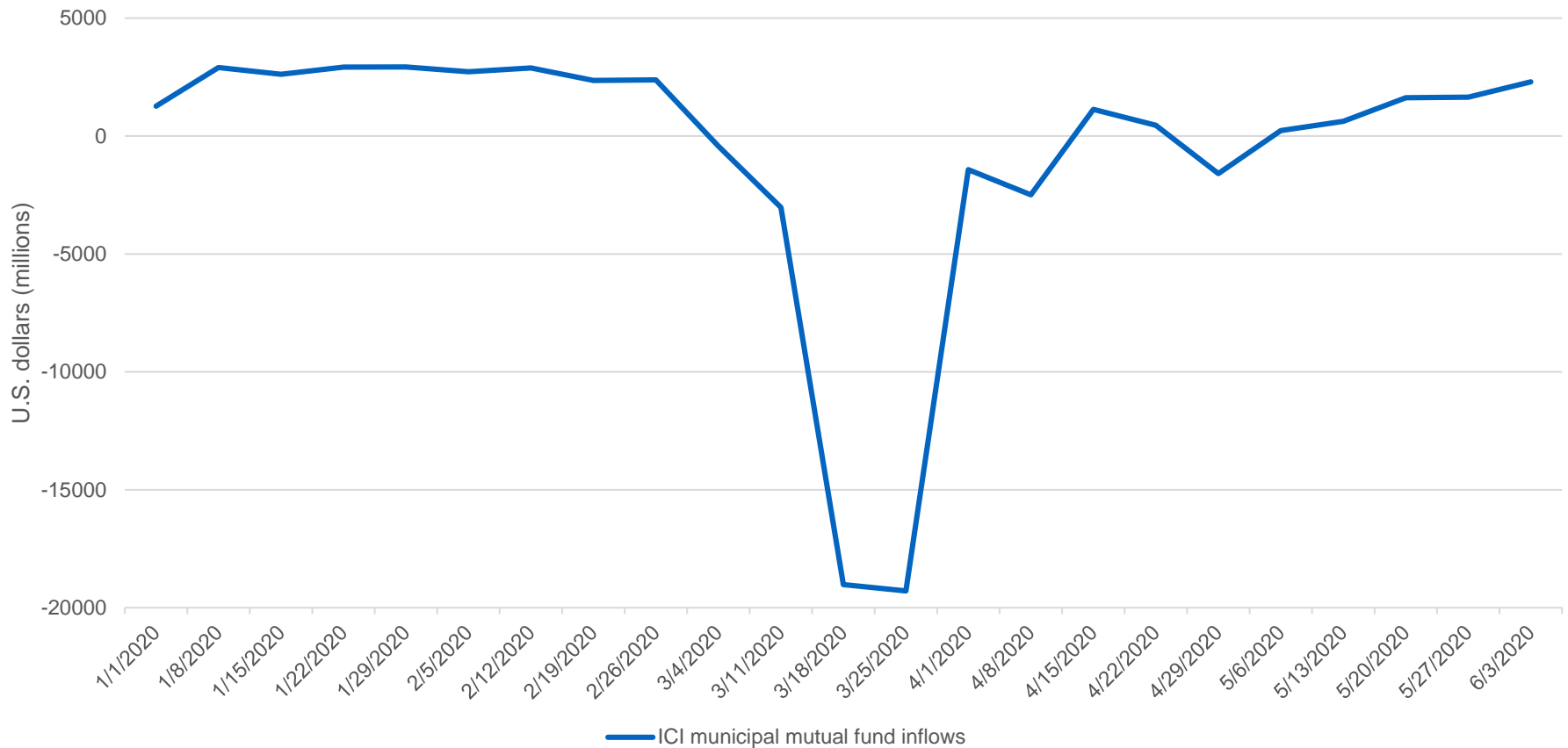
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Municipals



Fund Outflows Short Lived

Aggregate flows remain negative YTD, but inflows are returning to normal at a time when municipal issuance is already outpaced by debt maturities and interest payments.



Source: Bloomberg



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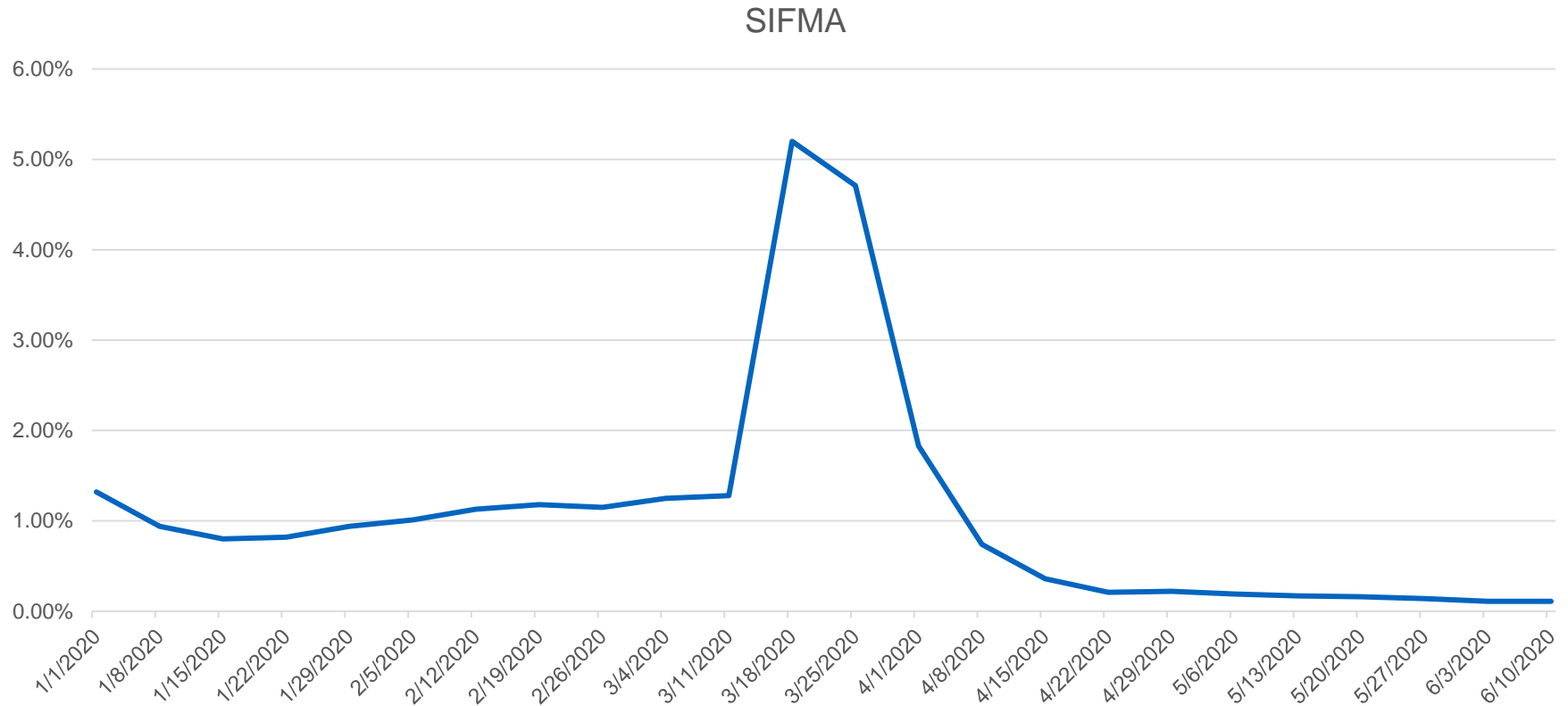
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VRDN Rates Plummet

After reaching their highest level since 2008 in March, yields on variable rate demand notes fell dramatically as cash flowed back into municipal mutual funds. The SIFMA index dropped to 0.11%, which is the lowest reading in 4 years.



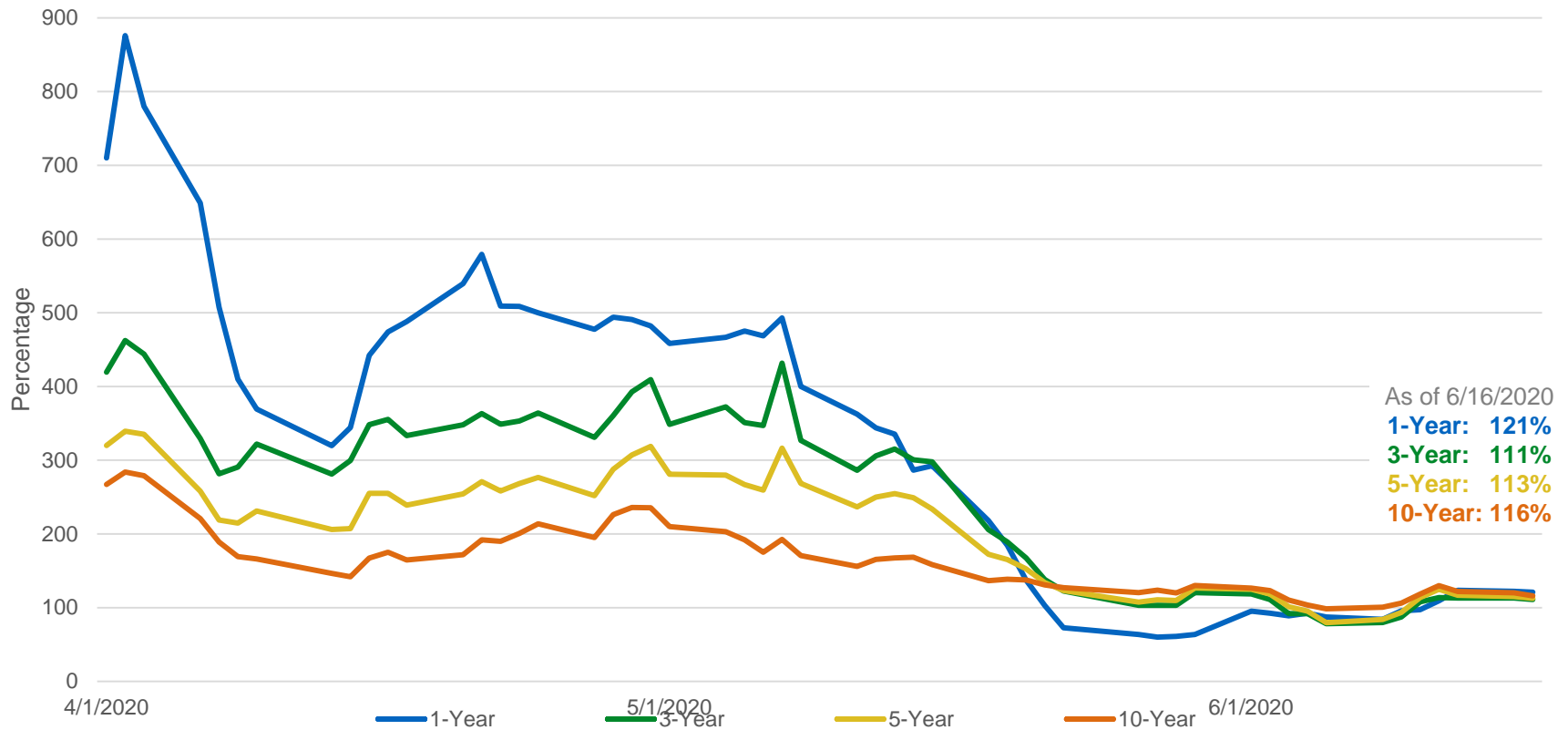
Source: Bloomberg



Munis Provide Relative Value

While muni/treasury ratios have declined from the unprecedented highs seen in late March/early April, tax-exempt muni yields still remain above Treasuries. This is notable, as muni-treasury ratios historically averaged around 80%.

AAA Muni to Treasury Ratio



Source: Thompson Reuters



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Credit Spreads Widen

The AAA to BBB spread has more than doubled since mid-March. After hovering around 60 basis points for more than six months, it has widened to 146 basis points (as of 6/16/2020). We believe there is room for further widening as states and local governments navigate the economic challenges brought on by the Coronavirus pandemic.

10-Year AAA to BBB Spread



Source: Thompson Reuters



Real Gross State Product Data for Major Oil-Producing States

We expect the major oil-producing states to experience more budgetary pressures in the current economic environment of COVID-19, which has reduced fuel demand, forcing energy prices lower.

	2018-2019e	State	2019-2020p	State
	Growth rate	Rank	Growth rate	Rank
Alaska	2.5%	16	-7.7%	34
Louisiana	1.3%	40	-8.8%	44
Montana	2.1%	26	-7.0%	13
New Mexico	3.7%	4	-7.1%	14
North Dakota	2.3%	20	-7.5%	28
Oklahoma	2.4%	19	-8.0%	35
Texas	4.4%	1	-7.2%	22
Wyoming	3.3%	6	-6.5%	8

e--estimate. p--projected.

Real gross state product (2012 US\$, SAAR). Ranks are shown from 1 (fastest growth) to 50 (slowest growth).

Sources: Bureau of Economic Analysis; IHS Markit; S&P Global Ratings.



Money Markets

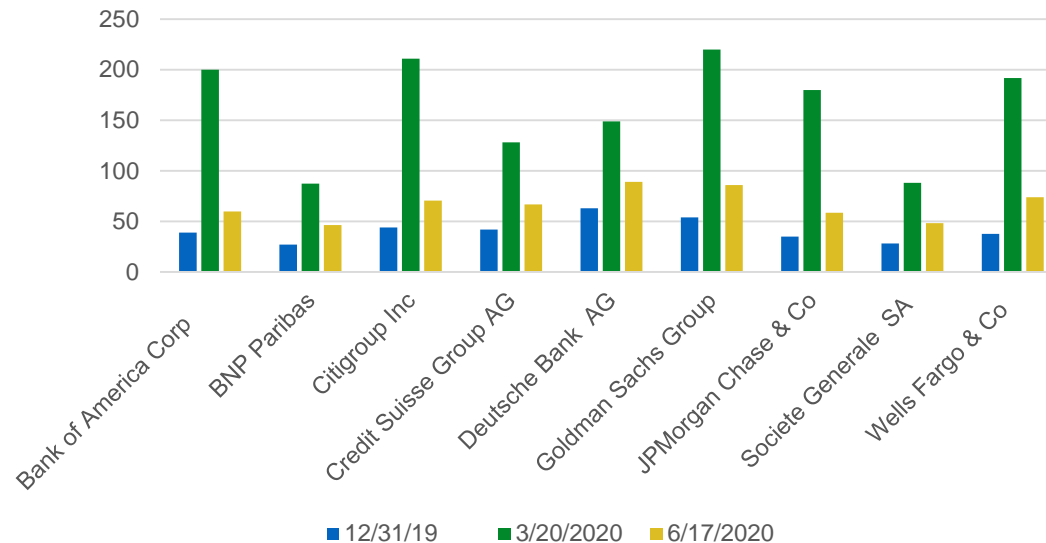


Credit Default Swap Levels

Effect of Economic Shutdown on Markets

Credit Default Swap (CDS) levels can be important indicators of perceived creditworthiness of corporate debt issuers. A higher level is an indication of less comparative creditworthiness.

Comparative CDS spreads for some major banks at the end of 2019, March 20, 2020 (just after the FOMC dropped short term rates effectively to zero) and June 17, 2020. The effect of the pandemic shutdown on the markets can be clearly seen, as well as the subsequent recovery. Still, levels in general have not settled back to the 12/31 pre-pandemic spreads.



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