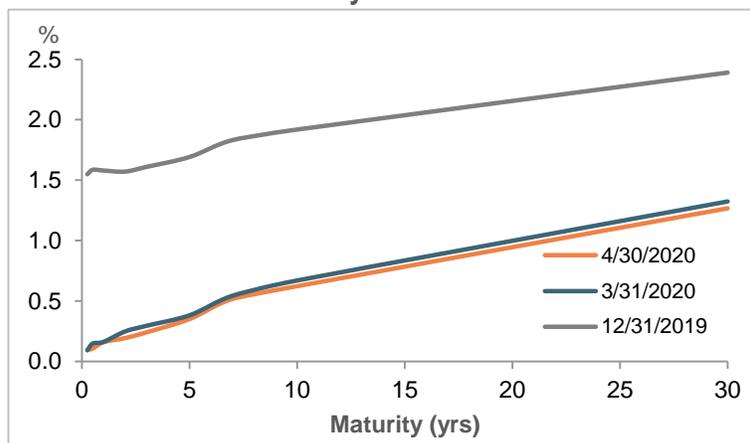


MARKET NEWS

- After one of the worst month's of performance in history, risk assets rebounded in April and made progress toward a relatively normal state, despite continued negative headlines and economic reports
 - GDP fell by 4.8% in the first quarter, the worst quarterly contraction since 2008 – however, the first quarter's figure likely does not capture the total impact of layoffs and business closings; second quarter GDP may fall 30%
 - US jobless claims totaled 30 million and total COVID-19 cases surpassed 3.25 million worldwide
- Despite the expected negative economic data, investor sentiment improved after news of a possible coronavirus treatment, and further fiscal and monetary action – which included broadening existing programs and loans to households
 - The Fed also commented that they intend to keep the fed fund target range near zero, and provide support until the economy has recovered
- Investment-grade corporates reversed many of the trends from the previous month amid the risk-on tone; corporate spreads tightened 70bps to 202bps, lower-quality outperformed higher-quality, and long-duration outperformed shorter-duration
 - Corporate credit curves steepened as a result, with the difference between the long corporate spread and the short corporate spread increasing from 13bps to 80bps, but still behind the longer-term average of roughly 100bps
- However, the issuance trend did not falter, with over \$285 billion pricing in April – the highest month of supply on record – as issuers continued to utilize the fixed income market, while the total amount of tapped revolvers leveled off
 - Boeing closed the month with a \$25 billion deal across seven tenors, the largest deal of 2020 and sixth largest of all-time; books reached as high as \$70 billion
- Asset-backed securities (ABS) issuance picked up after four weeks of no supply, and totaled almost \$10 billion; year-to-date issuance of \$60 billion is roughly 33% behind last year's pace of \$89 billion
- Tax-exempt municipals underperformed Treasuries, and the 10-year muni/Treasury ratio increased from 215% to 226%; however, intra-month volatility was high, with the ratio reaching as high as 307% and as low as 150%

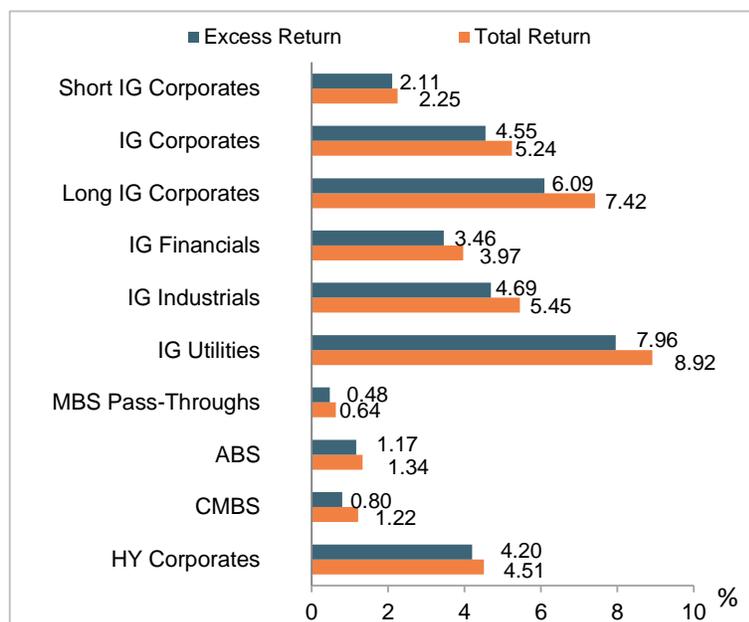
MARKET STATISTICS

Treasury Yield Curve



Maturity	2-year	5-year	10-year	30-year
4/30/2020	0.19	0.35	0.62	1.27
MTD Change	-0.06	-0.03	-0.05	-0.05
YTD Change	-1.38	-1.34	-1.30	-1.12

MTD Returns



As of: 4/30/20. Sources: Bloomberg, Bloomberg Barclays, Citigroup

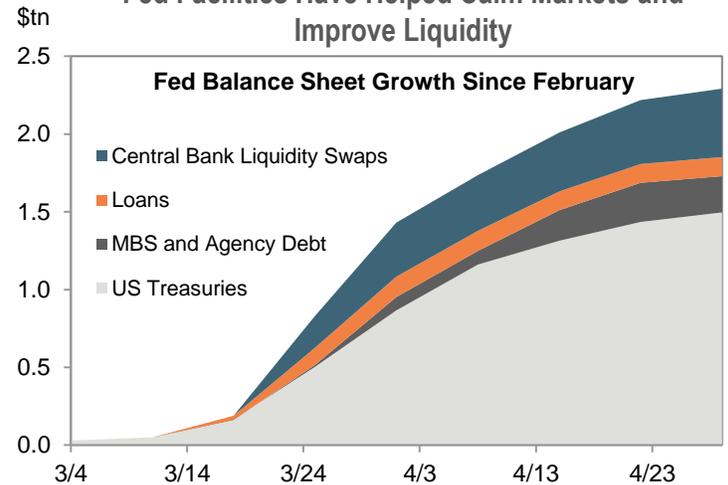
Excess returns are the curve-adjusted excess return of a given index relative to a term structure-matched position in Treasuries.

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MARKET THEMES

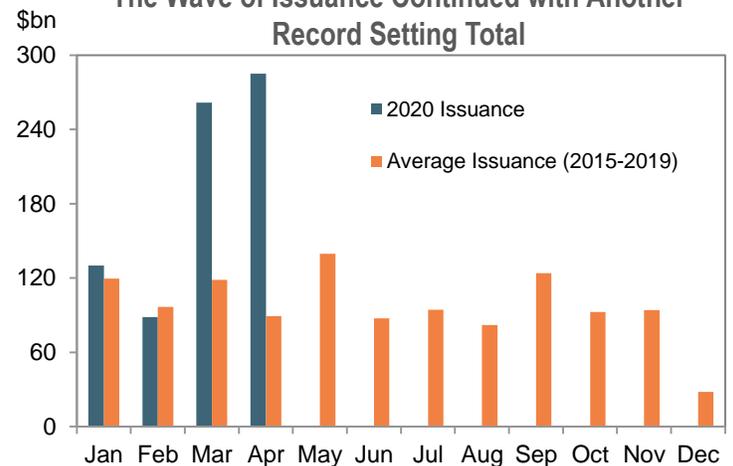
- Liquidity has markedly improved relative to March – with bid/ask spreads decreasing and investors more willing to trade lower-quality bonds, largely due to Fed actions
- The Fed introduced \$2.3 trillion of additional measures to aid state/local governments, and expanded asset purchases of fallen angels, ETFs, CLOs, ABS and CMBS; The Senate passed the \$484 billion to help small businesses, hospitals/healthcare providers, and COVID-19 testing
- Indices will also be impacted by Fed actions; the Treasury weighting of the Bloomberg Barclays Aggregate Index decreased by 2.5% compared to March, due to the Fed Treasury purchases
 - The corporate allocation increased by 2.0%, and securitized increased by 0.5%

Fed Facilities Have Helped Calm Markets and Improve Liquidity



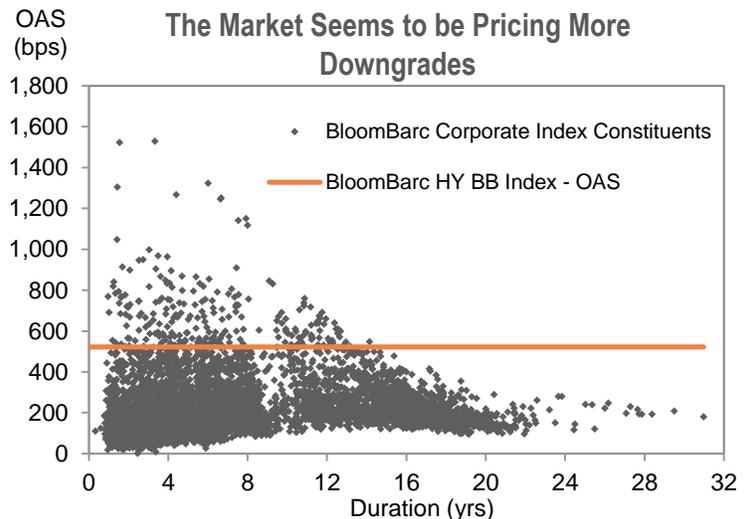
- Issuance eclipsed \$250 billion for the second consecutive month, as issuers continued to focus on shoring up liquidity
 - The year-to-date total of \$765 billion is roughly 85% ahead of last year's pace
- Amid the risk-on tone and improving sentiment, lower-quality issuers were the primary borrowers in April, accounting for 52% – after only accounting for 28% in March
- Issuers had to pay up to borrow, with new issue concessions averaging 23bps, however, deals were met with solid demand and books were multiple times oversubscribed
- The pace of issuance is not anticipated to slow until the summer – expectations are for \$150 to \$250 billion of supply in May – with issuers typically exiting earnings blackout periods next month

The Wave of Issuance Continued with Another Record Setting Total



- After already experiencing over \$135 billion of fallen angels in 2020, the market is expecting even more downgrades
 - Over 2%, or \$146 billion, of the investment-grade corporate index is trading with a spread greater than the spread of the BB-rated high-yield corporate index
- Record issuance is pushing up leverage, earnings reports have been disappointing so far and oil recently reached record lows, all putting pressure on companies to maintain their investment-grade ratings
 - The May WTI contract fell below \$0/barrel for the first time ever, and roughly 29% of earnings were below analyst estimates
- However, with the Fed's ability to purchase recent fallen angels, it may give investment-grade issuers less incentive to remain investment-grade in the short-term

The Market Seems to be Pricing More Downgrades



Sources: Bloomberg, Bloomberg Barclays, Citigroup as of 4/30/20. Fallen Angels as of 4/17/20 from Barclays Research. The views contained in this report are those of IR+M and are based on information obtained by IR+M from sources that are believed to be reliable. This report is for informational purposes only and is not intended to provide specific advice, recommendations, or projected returns for any particular IR+M product. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission from Income Research + Management. BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). BARCLAYS® is a trademark and service mark of Barclays Bank Plc (collectively with its affiliates, "Barclays"), used under license. Bloomberg or Bloomberg's licensors, including Barclays, own all proprietary rights in the Bloomberg Barclays Indices. Neither Bloomberg nor Barclays approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.