Capital Markets Snapshot

U.S. Economy

- The Federal Open Market Committee cut the fed funds range by 1%, bringing it to 0.00-0.25%. The Fed also announced it would be purchasing \$500B in Treasuries, \$200B in mortgage-backed securities, and cutting many banks' required reserve ratios to 0%.
- Officials worked to draft a fiscal stimulus package, which could be as large as \$2 trillion. Central to the plan would be tax rebates for most Americans, roughly \$60B in loans for the airline sector, and roughly \$450B for distressed industries and small businesses.
- Initial jobless claims jumped to 281k, the highest level in over two years, and analysts expect the figure to reach 1.5M on Thursday.

U.S. Markets

- Large-cap U.S. equities sold off by -22.4% over the period, in line with the global benchmark. Last week, the S&P 500 Index suffered its worst weekly loss (-15.0%) since October 2008. Small-cap equities fell 30.0% and experienced annualized volatility of 134%.
- U.S. stocks and bonds moved in the same direction on several days, contradicting the historically negative correlation between the two, and illuminating some liquidity issues in the Treasury market. The Fed stepped in, buying Treasuries across the curve.
- IG credit spreads rose from 1.36% to 3.51% and HY spreads rose from 5.54% to 10.34% as concerns over defaults mounted.

International Economy

- The European Central Bank expanded its TLTRO program, allowing some banks to borrow at -0.75%. The ECB also unveiled a €750B asset purchase program which won't require countries to request purchases, or to adhere to specific fiscal spending restrictions.
- The Bank of England cut its key interest rate from 0.75% to 0.10%, a record low. Additionally, the BOE added £200B to its quantitative easing target, bringing the new total to £645B.
- The ZEW Survey of Expectations in Germany dropped 58.2 points in March, from 8.7 to -49.5 (exp. -30.0). The monthly decline was the largest ever recorded by the ZEW Institute (inception in 1991).

International Markets

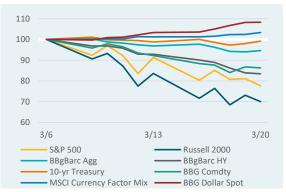
- Countries all over the world implemented stricter social distancing controls and travel restrictions. The tally of global confirmed COVID-19 cases eclipsed 300k, and the death toll approached 15k.
- Russia's decision to abstain from OPEC's proposed production cuts ignited a price war, aimed in part at reducing U.S. shale producers' market share. WTI crude oil fell from \$41.51 to \$22.63 per barrel.
- Global U.S. dollar liquidity became strained, as indicated by rising FRA-OIS spreads, and moves in cross-currency basis. To alleviate these pressures, the Fed eased its dollar liquidity swap line terms for G7 central banks, and extended lines to non-G-7 central banks.

U.S. WEEKLY INITIAL JOBLESS CLAIMS



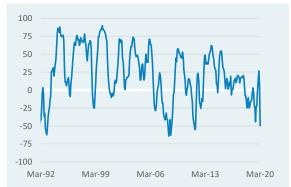
Source: Bloomberg, as of 3/20/20

PERFORMANCE (INDEXED 3/6/20=100)



Source: Bloomberg, as of 3/20/20

GERMAN EXPECTATIONS OF ECO. GROWTH



Source: ZEW Institute, as of 3/20/20

COVID-19: GLOBAL CONFIRMED DEATHS



Source: Bloomberg, as of 3/22/20



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Capital Markets Snapshot

MARKET PERFORMANCE

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S&P 500 TR USD Russell 2000 TR USD MSCI ACWI NR USD MSCI EAFE NR USD

MSCI EM NR USD **Fixed Income**

Barclays US Treasury US TIPS TR USD
Barclays US Treasury TR USD
Barclays Long Term US Treasury TR USD
Barclays US Agg Bond TR USD
Barclays US Credit TR USD
Barclays High Yield Corporate TR USD
JPM EMBI Global Diversified TR USD

Other

Bloomberg Commodity TR USD
Wilshire US REIT TR USD
MSCI Currency Factor Mix ER USD

| Last Two Weeks 3/9/2020 - 3/20/2020 | | MTD | | QTD | | YTD | |
|--|---------|--------|---------|--------|---------|--------|---------|
| Return | Std Dev | Return | Std Dev | Return | Std Dev | Return | Std Dev |
| -22.37 | 113.05 | -21.87 | 98.38 | -28.33 | 53.42 | -28.33 | 53.42 |
| -29.96 | 133.86 | -31.24 | 112.56 | -39.04 | 61.12 | -39.04 | 61.12 |
| -22.81 | 84.34 | -22.45 | 73.66 | -29.50 | 40.98 | -29.50 | 40.98 |
| -23.08 | 56.65 | -22.82 | 51.13 | -31.26 | 30.31 | -31.26 | 30.31 |
| -20.56 | 62.37 | -20.01 | 54.93 | -27.76 | 32.73 | -27.76 | 32.73 |

| -6.69 | 23.94 | -4.77 | 21.32 | -1.42 | 11.72 | -1.42 | 11.72 |
|--------|-------|--------|-------|--------|-------|--------|-------|
| -1.65 | 21.89 | 1.12 | 19.18 | 6.34 | 10.52 | 6.34 | 10.52 |
| -6.48 | 68.23 | 1.27 | 61.56 | 15.46 | 33.10 | 15.46 | 33.10 |
| -5.39 | 15.33 | -3.61 | 14.56 | 0.01 | 8.26 | 0.01 | 8.26 |
| -14.21 | 17.60 | -12.54 | 20.60 | -9.28 | 12.98 | -9.28 | 12.98 |
| -16.59 | 20.52 | -16.96 | 22.17 | -18.11 | 14.50 | -18.11 | 14.50 |
| -18.59 | 35.39 | -17.66 | 33.73 | -17.22 | 19.67 | -17.22 | 19.67 |

| -13.67 | 41.26 | -13.88 | 37.95 | -24.24 | 22.23 | -24.24 | 22.23 |
|--------|--------|--------|--------|--------|-------|--------|-------|
| -34.04 | 131.61 | -31.85 | 113.95 | -36.68 | 62.50 | -36.68 | 62.50 |
| 3.35 | 7.00 | 2.40 | 7.29 | 2.85 | 4.32 | 2.85 | 4.32 |

Source: Morningstar, Data as of last available market close, Top/bottom two highlighted.

ECONOMIC DATA - RELEASED

| Date | Country | Event | Freq | Period | Surv(M) | Actual | Surprise |
|----------|---------|----------------------------------|------|--------|---------|---------|----------|
| 03/09/20 | EC | Sentix Investor Confidence | M | Mar | -11.4 | -17.1 | -1.5 |
| 03/10/20 | IT | Industrial Production WDA YoY | M | Jan | -3.7% | -0.1% | 6.9 |
| 03/10/20 | US | NFIB Small Business Optimism | M | Feb | 102.9 | 104.5 | 1.4 |
| 03/11/20 | US | CPI Ex Food and Energy YoY | М | Feb | 2.3% | 2.4% | 1.2 |
| 03/11/20 | JN | PPI YoY | M | Feb | 1.1% | 0.8% | -1.2 |
| 03/12/20 | EC | Industrial Production WDA YoY | M | Jan | -2.9% | -1.9% | 1.2 |
| 03/12/20 | EC | ECB Deposit Facility Rate | D | 12-Mar | -0.50% | -0.50% | 0.0 |
| 03/13/20 | US | U. of Mich. Current Conditions | M | Mar P | 112.8 | 112.5 | -0.2 |
| 03/13/20 | US | U. of Mich. Expectations | М | Mar P | 88.1 | 85.3 | -0.9 |
| 03/15/20 | US | FOMC Rate Decision (Upper Bound) | D | 15-Mar | | 0.25% | |
| 03/15/20 | JN | BOJ Policy Balance Rate | D | 19-Mar | -0.10% | -0.10% | 0.0 |
| 03/16/20 | IT | General Government Debt | M | Jan | | 2443.5b | |
| 03/16/20 | US | Empire Manufacturing | М | Mar | 3.0 | -21.5 | -5.4 |
| 03/17/20 | GE | ZEW Survey Expectations | М | Mar | -30.0 | -49.5 | -1.9 |
| 03/17/20 | US | Retail Sales Advance MoM | М | Feb | 0.2% | -0.5% | -5.0 |

ECONOMIC DATA - NEXT TWO WEEKS

| Date | Country | Event | Freq | Period | Prior | Surv(M) | Std Dev | | | |
|----------|---------|-----------------------------------|------|--------|-------|---------|---------|--|--|--|
| 03/23/20 | EC | Consumer Confidence | M | Mar A | -6.6 | -13.0 | 4.8 | | | |
| 03/24/20 | FR | Markit France Composite PMI | M | Mar P | 52.0 | 38.1 | 4.1 | | | |
| 03/24/20 | GE | Markit/BME Germany Composite PMI | M | Mar P | 50.7 | 41.5 | 2.5 | | | |
| 03/24/20 | EC | Markit Eurozone Manufacturing PMI | M | Mar P | 49.2 | 39.0 | 2.7 | | | |
| 03/24/20 | EC | Markit Eurozone Services PMI | M | Mar P | 52.6 | 40.0 | 4.6 | | | |
| 03/24/20 | EC | Markit Eurozone Composite PMI | M | Mar P | 51.6 | 39.3 | 64.4 | | | |
| 03/24/20 | UK | Markit/CIPS UK Composite PMI | M | Mar P | 53.0 | 45.1 | 2.6 | | | |
| 03/24/20 | US | Markit US Manufacturing PMI | M | Mar P | 50.7 | 44.0 | 4.2 | | | |
| 03/24/20 | US | Markit US Services PMI | M | Mar P | 49.4 | 42.0 | 4.5 | | | |
| 03/26/20 | US | Initial Jobless Claims | W | 21-Mar | 281k | 1500k | 995.9 | | | |
| 03/27/20 | US | PCE Core Deflator YoY | M | Feb | 1.6% | 1.7% | 0.1 | | | |
| 04/01/20 | US | ISM Manufacturing | M | Mar | 50.1 | 48.2 | 0.0 | | | |
| 04/03/20 | US | Change in Nonfarm Payrolls | M | Mar | 273k | 90k | 136.6 | | | |
| 04/03/20 | US | Unemployment Rate | M | Mar | 3.50% | 3.60% | 0.1 | | | |
| 04/03/20 | US | Underemployment Rate | M | Mar | 7.0% | | | | | |

Source: Bloomberg

