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## US Equity Strategy

### Risk/Reward Improving

The equity market has been coping with the COVID-19 outbreak across developed markets for the last two weeks, forcing investors to guesstimate the impact to demand, supply chain disruptions and credit. The Saudi/Russia oil price war that broke out over this weekend (oil collapsed by 25%, largest decline since '91) turned an already fragile backdrop into a perfect storm for risky assets on Monday, March 9th—essentially a black swan event. S&P500 experienced an outright crash. The 8% one-day decline turned out to be the worst day for S&P500 since 2008 (19th worst day since 1928). While this sell-off has wiped out 2-years' worth of gains for S&P500, history suggests that equal or worse single-day sell-offs were followed by median forward returns of +4% and +17% over the subsequent 1-week and 12-month periods, respectively. The speed and intensity of the sell-off has shaken investor confidence with many now modeling recession scenarios even though there is still significant lack of clarity on the actual fundamental impact. It is important to keep in mind that the sharp sell-off is also symptomatic of a fragile market structure that can amplify price both downside and upside—a volatility shock coinciding with a collapse in liquidity and significant forced selling by systematic portfolios (i.e. similar to Dec '18 market crash).

The S&P500 multiple just experienced one of the largest multiple de-ratings in the last 30-years. Over the last 1-month its multiple de-rated by ~3.5 turns, which is comparable to the TMT recession and the GFC. The index multiple is currently at 16x (assuming a conservative earnings growth of 3-4% in 2020), putting it in-line with its long-term median. Additionally, in a world of near-zero rates and low nominal growth, US equities are one of the few remaining higher quality yielding assets, with a dividend income of ~2.3% and 4-6% long-term EPS growth. Currently, a record ~85% of S&P500 stocks have higher dividend and shareholder yields than US 10yr bond yield (see Figure 6). More so, equity positioning has significantly reduced. Fund flows from equities-to-bonds have reached extreme levels on a 3, 6, and 12-month rolling basis measured since the beginning of this cycle. Since the start of this sell-off, we estimate that retail and institutional equity fund flows have seen ~\$40B in outflows (compared to ~\$60B during the 4Q18 sell-off). Systematic strategies have sold ~\$400B in equities and broadly their equity positioning currently sits at very low levels (see [Report](#)). All the key momentum signals have turned negative (e.g. including 12m) and 1-2 month realized volatility measures are at cycle highs. While buyback activity was slow at the start of the year with market reaching new highs, both discretionary and program-based buyback executions significantly picked up during the current market sell-off, recently running at ~\$6-8B per day.

The current equity sell-off reached bear market territory (~ -20% from peak) and is now almost in-line with the median market-sell off since 1928 that preceded an upcoming recession. Based on history, a market sell-off of this magnitude implies a 65-75% chance of a recession in the next 12 months. In our view, however, the market has gone ahead and priced in too severe of an adverse scenario, assuming we get timely and strong counter-policy response and a COVID-19 outbreak that peaks in the coming weeks. JPM Economics (see [Report](#)) is now expecting the Fed to cut rates to 0% at the upcoming FOMC meeting or sooner, with the potential of providing dovish guidance and considering additional policy tools (i.e. asset purchases). The US administration is working on a potentially large stimulus plan targeting both individuals and businesses most impacted by COVID-19. For instance, we estimate that a combination of payroll

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Fig 1: S&P 500 Extreme Multiple De-Rating

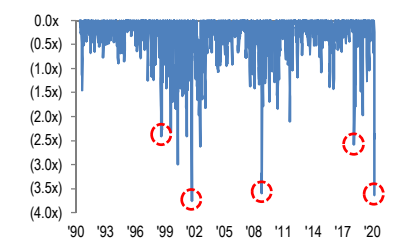
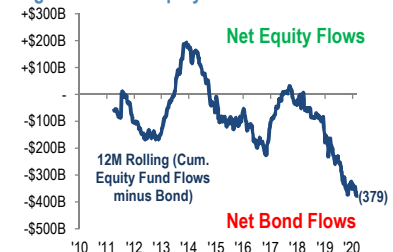


Fig 2: Bond vs. Equity Flows at 12M Extreme



Source: J.P. Morgan US Equity Strategy & Global Quantitative Research

See page 10 for analyst certification and important disclosures.

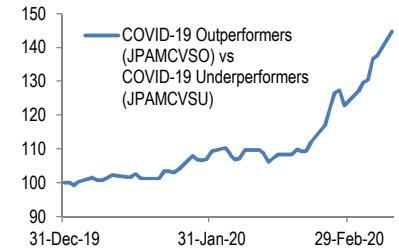
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tax reduction, refinancing of in-the-money residential mortgages and lower gasoline prices could cushion the average US household by providing ~\$1,000 saving in the next twelve months. Most importantly, the spread of COVID-19 in Europe and in the US remains highly uncertain, however JPM research (see [Report](#)) is modeling cases to peak end of this month / beginning of next. In Asia, 3 of the largest markets are seeing relative improvement. New cases in South Korea appear to be peaking, China continues to deliver on a gradual normalization with limited new cases (factory capacity up to 90% for mid-large enterprises), and Taiwan has sidestepped the outbreak (see [Report](#)). Also, on the commodity front, the period of depressed oil prices could be short-lived as Saudi/Russia pain thresholds are surpassed (see [Oil Market Special](#)). Given the above base case, we view the current level of S&P500 offering an attractive risk-reward, and maintain our 2020 S&P500 price target of 3,400.

We do acknowledge the potentially extreme binary outcome as we work through the impact of COVID-19, but still hold the view that policy supports should ultimately outlast the outbreak. If COVID-19 intensifies and proliferates well beyond JPM base case scenario and the anticipated counter-policy responses turn out to be underwhelming, the S&P500 will most likely face further downside. Under this pessimistic scenario, the equity multiple may not find a bottom until it hits 14-15x and EPS growth turns negative—implying a recession case of ~2,300 level for S&P500. Even in such a downside scenario we expect earnings recession to be relatively shallow by historical standards, given relatively healthy balance sheets of US consumers and key corporate sectors.

Thematically, after a ~40% YTD outperformance of COVID-19 beneficiaries relative to their negatively impacted peers, we see an increasingly attractive opportunity for a potential reversion pair-trade. See [Market Update](#), Figure 18 and Figure 19.

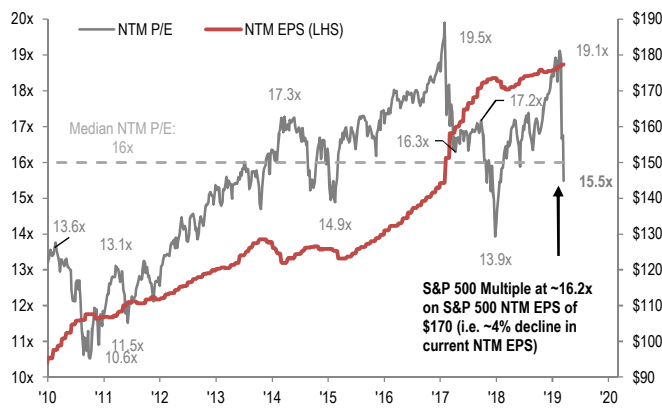
Fig 3: COVID-19 Outperformers vs Underperformers Baskets



Source: J.P. Morgan US Equity Strategy & Global Quantitative Research

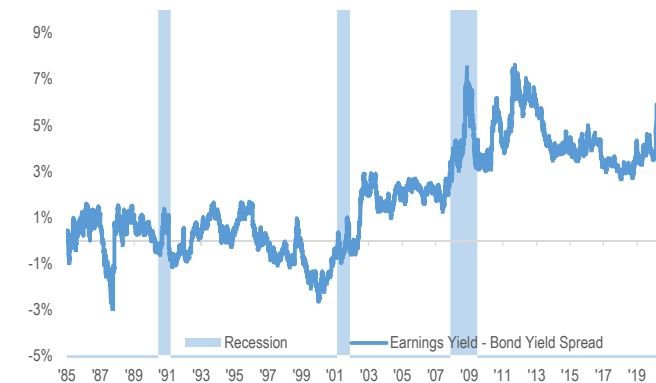
## Equity Valuation, Flows and Performance

**Figure 4: S&P 500 Valuation In-Line with Long-Term Median**  
Since 2010



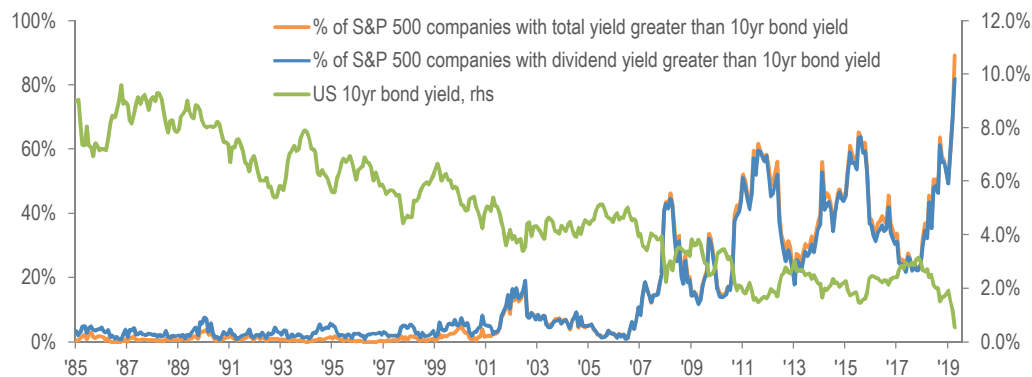
Source: J.P. Morgan US Equity Strategy & Global Quantitative Research, I/B/E/S

**Figure 5: Cross-Asset Valuation Most Compelling Since 2013**  
Earnings Yield vs. Bond Yield Spread



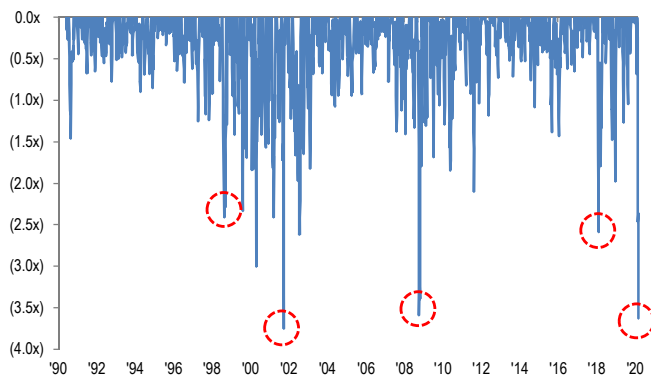
Source: J.P. Morgan US Equity Strategy & Global Quantitative Research

**Figure 6: Record # of S&P 500 Stocks with Dividend Yields above Bond Yield**  
Since 1985



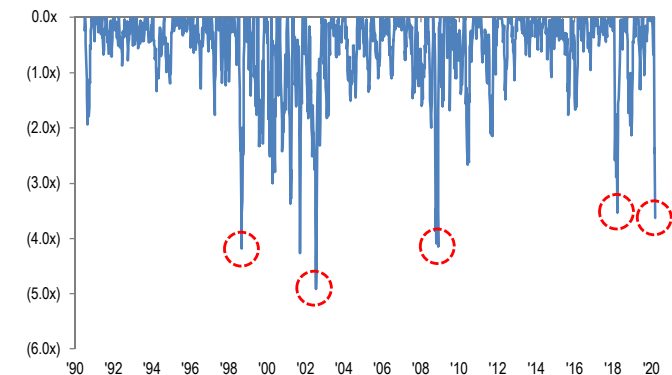
Source: J.P. Morgan US Equity Strategy & Global Quantitative Research, I/B/E/S

**Figure 7: S&P 500 Extreme Multiple De-Rating**  
NTM P/E Multiple, 1M Drawdown



Source: J.P. Morgan US Equity Strategy and Quantitative Research, I/B/E/S

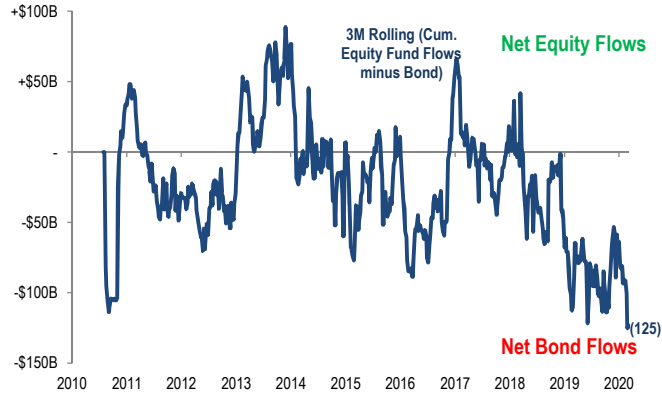
**Figure 8: S&P 500 Extreme Multiple De-Rating**  
NTM P/E Multiple, 2M Drawdown



Source: J.P. Morgan US Equity Strategy & Global Quantitative Research, I/B/E/S

**Figure 9: Bond vs. Equity Flows at a 3M Extreme**

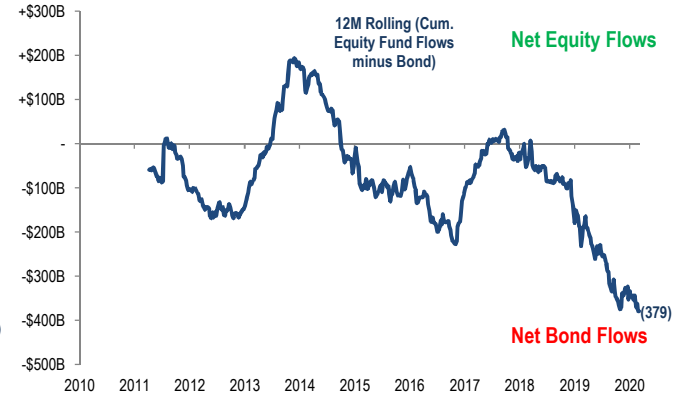
3M Rolling, As of 3/4/2020



Source: J.P. Morgan US Equity Strategy and Quantitative Research, EPFR

**Figure 10: Bond vs. Equity Flows at a 12M Extreme**

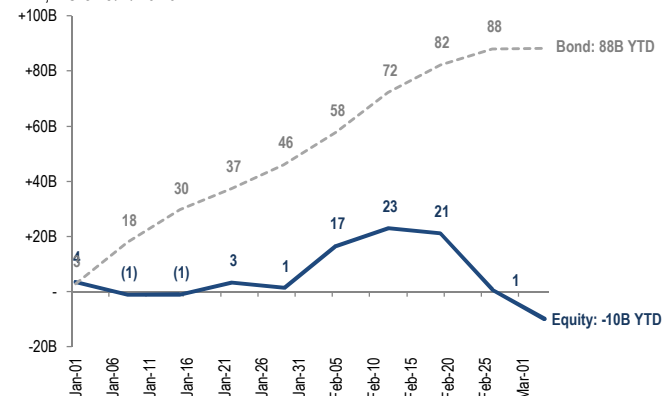
12M Rolling, As of 3/4/2020



Source: J.P. Morgan US Equity Strategy and Quantitative Research, EPFR

**Figure 11: Bond vs. Equity Flows**

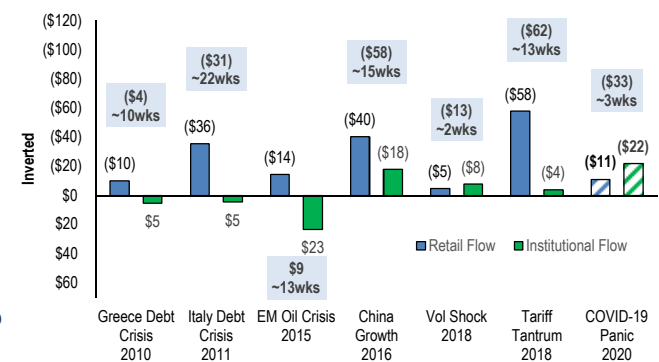
YTD, As of 3/4/2020



Source: J.P. Morgan US Equity Strategy and Quantitative Research, EPFR

**Figure 12: Retail and Institutional Equity Fund Flows**

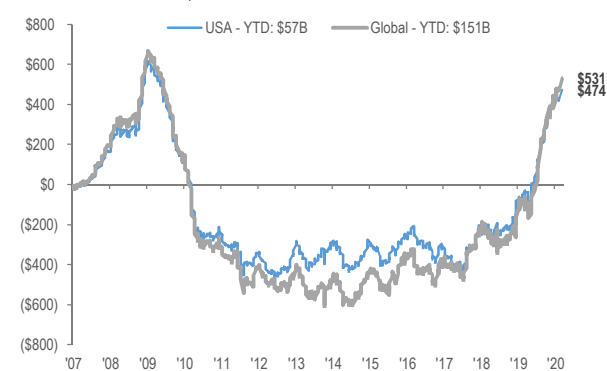
Market Corrections of >10% since 2010, As of 3/4/2020



Source: J.P. Morgan US Equity Strategy and Quantitative Research, BEA, EPFR

**Figure 13: Flows into Money Markets Approaching GFC Highs**

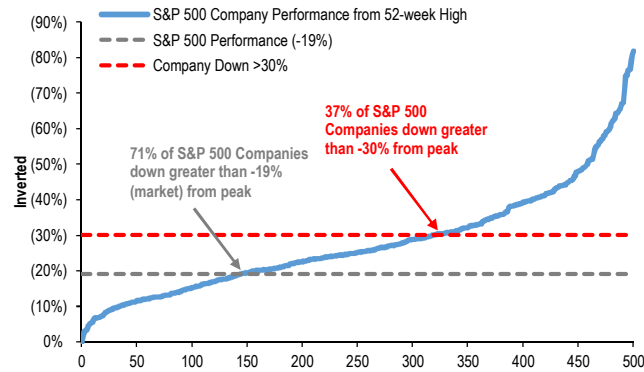
Cumulative Since 2007, as of 3/4/2020



Source: J.P. Morgan US Equity Strategy & Global Quantitative Research, EPFR  
Note: Retail defined as a minimum investment of <\$100K and non ETF (could include some institutional accounts); Institutional defined as minimum investment >\$100K, includes ETFs

Figure 14: S&P 500 Stock Drawdown Analysis

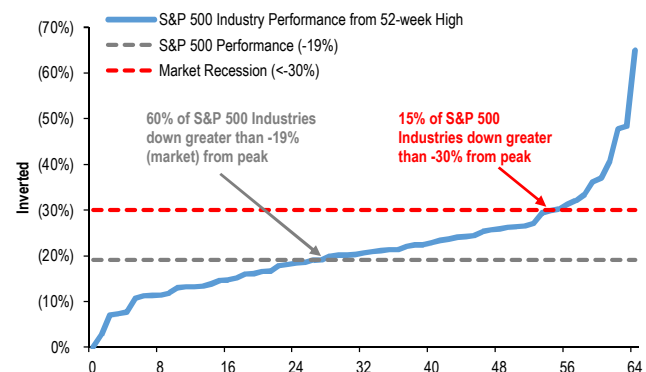
52-Week High vs. Current



Source: J.P. Morgan US Equity Strategy & Global Quantitative Research

Figure 15: S&P 500 Industry Drawdown Analysis

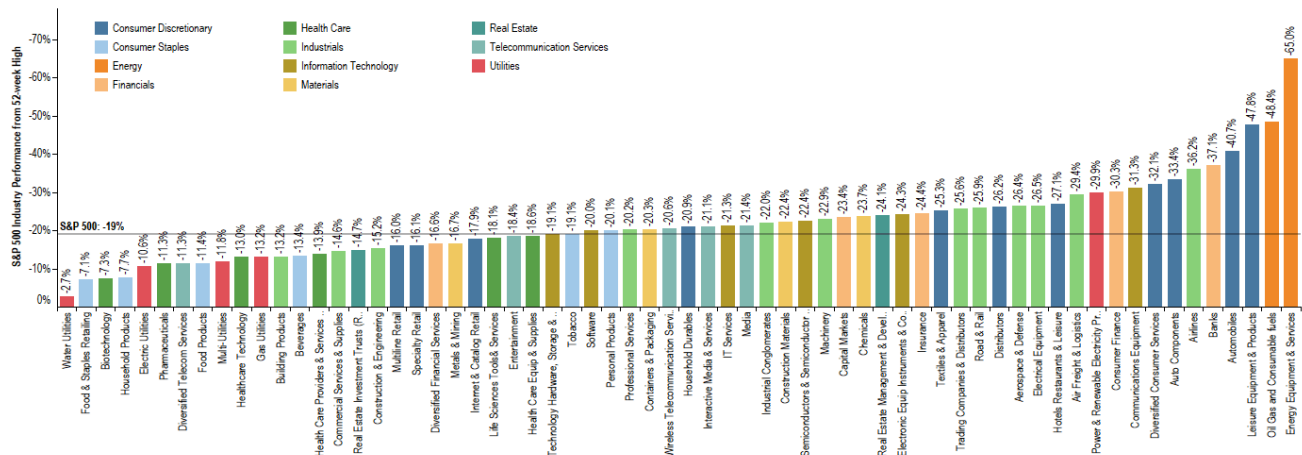
52-Week High vs. Current



Source: J.P. Morgan US Equity Strategy & Global Quantitative Research

Figure 16: S&P 500 Industry Performance

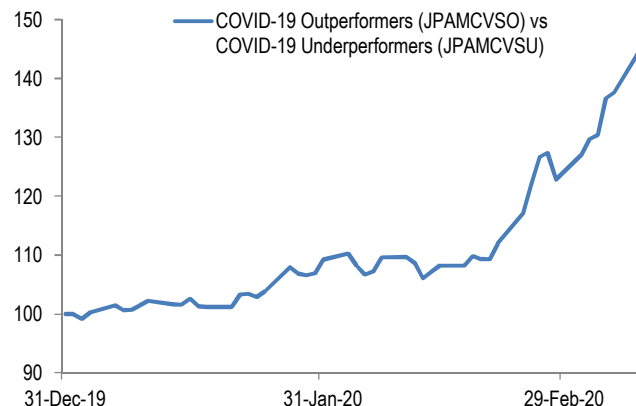
52-Week High vs. Current



Source: J.P. Morgan US Equity Strategy & Global Quantitative Research

Figure 17: COVID-19 Outperformers vs Underperformers Baskets

S&P 500 companies sensitive to COVID-19 Outbreak



Source: J.P. Morgan US Equity Strategy & Quantitative Research, Bloomberg, Factset

**Historical Perspective on stock market corrections:** How does the recent correction in the equity market, perhaps still ongoing, compare with past corrections? Looking back at daily history of S&P 500 from 1928, there are 98 episodes when the equity market fell 10% or more before recovering. If the recovery is 10% or more, the prior correction is considered to be over. The table below shows that the typical correction lasts roughly 3 months (64 calendar days). Bear market declines (greater than 20%) tend to last closer to 4 months. Interestingly in the last 50 years, the duration of corrections has become longer. While the median decline in a bear market at ~28% is similar to long-term average, its duration is 50% more at 6 months compared to long term 4 months. Deeper sell-offs are more likely lead to recessions. Nearly 65%-75% of bear markets end up in recessions over the next 12 months.

**Table 1: Historical Overview of S&P 500 Sell-Offs**

|                              | Sell-Off (%) | Average Duration (Days) | # of Episodes | # Recession, Next 12M | Percent Recessions |
|------------------------------|--------------|-------------------------|---------------|-----------------------|--------------------|
| <b>History (Since 1928-)</b> |              |                         |               |                       |                    |
| All Corrections <=-10%       | -16.4%       | 64                      | 98            | 47                    | 48%                |
| Corrections <=-15%           | -20.8%       | 77                      | 58            | 35                    | 60%                |
| Corrections <=-20% (bear)    | -27.5%       | 85                      | 33            | 21                    | 64%                |
| <b>History (Since 1970-)</b> |              |                         |               |                       |                    |
| All Corrections <=-10%       | -16.0%       | 91                      | 41            | 18                    | 44%                |
| Corrections <=-15%           | -19.4%       | 98                      | 23            | 14                    | 61%                |
| Corrections <=-20% (bear)    | -29.8%       | 134                     | 8             | 6                     | 75%                |
| <b>History (Since 1980-)</b> |              |                         |               |                       |                    |
| All Corrections <=-10%       | -16.5%       | 89                      | 32            | 13                    | 41%                |
| Corrections <=-15%           | -19.7%       | 87                      | 19            | 11                    | 58%                |
| Corrections <=-20% (bear)    | -27.6%       | 123                     | 7             | 5                     | 71%                |
| <b>History (Since 1990-)</b> |              |                         |               |                       |                    |
| All Corrections <=-10%       | -18.9%       | 87                      | 23            | 8                     | 35%                |
| Corrections <=-15%           | -19.8%       | 87                      | 15            | 8                     | 53%                |
| Corrections <=-20% (bear)    | -27.5%       | 134                     | 6             | 5                     | 83%                |

Source: J.P. Morgan Quantitative and Derivatives Strategy

While considerable attention is paid to macroeconomic indicators in anticipating turns in the business cycle, usually financial variables move earlier than the reported macro data. The direction of these financial variables, including bond yields and spreads, commodities, currency, yield curve, volatility, valuations etc. reveal the stress points in the financial markets that might be spilling into equities. Table 2 below shows the historical movement in 14 financial variables during past market corrections and puts the latest stock correction into perspective. Several observations stand out:

- Credit spreads in the current correction have remained relatively well behaved so far. This is consistent with *aggregate* debt burden being close to historical lows currently though there are some sectors like energy and auto that are under stress. Indeed high spread has been the lowest in this episode compared to 20 other sell-offs since 1994.
- Underlying this relatively benign backdrop are low real bond yields and real policy rates. Real policy rate was last negative back in mid-1950s. As long as deflation seems more threatening than inflation, it is likely that real rates could remain low.
- Among commodity prices, oil is under greater pressure now compared to past corrections; the 44% year-on-year decline is low at 23-percentile when compared to past oil price declines concurrent with equity corrections. Ex-energy commodity price declines are not benign (they are in 50-60 percentiles) but are not extreme either. Gold prices, often seen as haven in turbulence, are at the higher end compared to average corrections (65-70%-ile). They pick up in gold is closer to median (50%-ile) if only recession sell-offs are considered.
- Implied equity volatility, like gold price, is above the average norm for corrections (~70%-ile relative to history) and future recessions (~60%-ile). Bond volatility is not as extreme so far on average in this sell off but it is rising fast and its high on Monday was close to 73%-ile relative to past extreme points.
- Unadjusted forward P/E is above average (65%-75%-ile) relative to historical norms during corrections. Valuations might be overstated once low bond yield is taken into account. The forward earnings yield spread with bond yield is far above average (80%-ile) i.e. equities are reasonably valued on a cross-asset basis in the current correction.

Table 2: Behavior of Financial Variables during Equity Market Corrections: Current vs Historical

| Variable                                | Start  | #* | Full History |               | Recession Next 12 Months |               | Current (level) |        | Current, %-ile rel. to Full History |       | Current, %-ile rel. to NTM Recession |       |
|---|--------|----|--------------|---------------|--------------------------|---------------|-----------------|--------|-------------------------------------|-------|--------------------------------------|-------|
|   |        |    | Average      | Avg. of Worst | Average                  | Avg. of Worst | Average         | Worst  | Average                             | Worst | Average                              | Worst |
| Credit OA Spread (High=Bad)             | Jun-89 | 22 | 1.53         | 1.83          | 1.83                     | 2.48          | 1.14            | 1.62   | 23%                                 | 40%   | 23%                                  | 27%   |
| High Yield OA Spread (High=Bad)         | Jan-94 | 20 | 6.73         | 8.39          | 7.75                     | 13.95         | 4.63            | 6.42   | 18%                                 | 35%   | 0%                                   | 0%    |
| Real 10-Yr Bond Yield (High=Bad)        | Jan-62 | 45 | 2.53         | 2.95          | 3.15                     | 3.56          | -0.42           | -0.06  | 4%                                  | 4%    | 9%                                   | 8%    |
| Real Fed Funds Rate (High=Bad)          | Jul-54 | 49 | 1.93         | 2.83          | 4.01                     | 5.03          | -0.05           | -0.04  | 29%                                 | 22%   | 29%                                  | 19%   |
| Yield Curve 10Yr-3M (Low=Bad)           | Jan-62 | 45 | 1.21         | 1.08          | 0.67                     | 0.00          | -0.04           | -0.17  | 15%                                 | 23%   | 36%                                  | 42%   |
| Oil Prices, YoY% (Low=Bad)              | Mar-83 | 27 | 13%          | -9%           | 13%                      | -17%          | -16%            | -44%   | 28%                                 | 17%   | 36%                                  | 23%   |
| Comdty ex Energy, YoY% (Low=Bad)        | May-81 | 30 | 0%           | -8%           | -5%                      | -14%          | -5%             | -7%    | 45%                                 | 51%   | 54%                                  | 67%   |
| Gold, YoY% (High=Bad)                   | Jan-70 | 40 | 9%           | 16%           | 5%                       | 30%           | 24%             | 30%    | 71%                                 | 64%   | 56%                                  | 50%   |
| US Dollar Index, YoY% (High=Bad)        | Jan-73 | 39 | 2%           | 6%            | 5%                       | 8%            | 2%              | 2%     | 49%                                 | 39%   | 33%                                  | 25%   |
| Bond Volatility Index (High=Bad)        | Apr-88 | 23 | 103.72       | 131.06        | 126.00                   | 178.80        | 91.09           | 163.70 | 27%                                 | 73%   | 0%                                   | 44%   |
| VIX (High=Bad)                          | Jan-86 | 26 | 24.67        | 43.19         | 25.31                    | 43.74         | 32.71           | 54.46  | 72%                                 | 73%   | 63%                                  | 58%   |
| Realized Volatility (High=Bad)          | Feb-28 | 97 | 0.22         | 0.29          | 0.28                     | 0.36          | 0.22            | 0.36   | 51%                                 | 62%   | 38%                                  | 47%   |
| Forward P/E (High=Bad)                  | Jan-85 | 26 | 16.04        | 16.50         | 11.81                    | 12.68         | 17.49           | 19.08  | 65%                                 | 71%   | 75%                                  | 76%   |
| Earnings Yield - Bond Yield (High=Good) | Jan-85 | 26 | 1.38         | 2.39          | 3.15                     | 4.09          | 4.60            | 5.92   | 81%                                 | 80%   | 64%                                  | 59%   |

Source: J.P. Morgan Quantitative and Derivatives Strategy  
\*# of Corrections >10%



## J.P. Morgan Global Trade & COVID-19 Underperformers Basket (JPAMCVSU <Index>)

**Criteria:** The COVID-19-sensitive (underperformers) basket is comprised of stocks that are at risk of further COVID-19 outbreak. Based on textual analysis, these stocks had higher discussions around the virus in their corporate call transcripts and underperformed their sectors in the recent COVID-19-related sell-off. Stocks with high idiosyncratic performance were excluded.

Figure 18: J.P. Morgan COVID-19 Underperformers Basket (JPAMCVSU <Index>)

Priced as of 3/9/2020

| GLCS Sector/Industry                          | Company                           | Ticker | Company Stats |             |          | IBES Estimates   |                | Valuation     |         |       |
|---|-----------------------------------|--------|---------------|-------------|----------|------------------|----------------|---------------|---------|-------|
|   |                                   |        | Current Price | Market Cap  | YTD Perf | Sales Growth NTM | EPS Growth NTM | EV/EBITDA LTM | P/E NTM | P/B   |
| <b>Sector: Materials</b>                      | Avery Dennison Corporation        | AVY    | \$115.5       | \$9,617     | -12%     | 5%               | 9%             | 12.6x         | 16.1x   | 8.0x  |
| Containers & Packaging                        | WestRock Company                  | WRK    | \$26.6        | \$6,878     | -38%     | -1%              | -10%           | 7.3x          | 7.9x    | 0.6x  |
| Metals & Mining                               | Freeport-McMoRan, Inc.            | FCX    | \$8.2         | \$11,941    | -37%     | 8%               | 2540%          | 13.8x         | 15.6x   | 1.3x  |
| <b>Sector: Industrials</b>                    | Emerson Electric Co.              | EMR    | \$50.4        | \$30,812    | -34%     | 1%               | 6%             | 13.8x         | 13.0x   | 3.7x  |
| Machinery                                     | Flowserve Corporation             | FLS    | \$30.0        | \$3,932     | -40%     | 5%               | 13%            | 13.3x         | 12.1x   | 2.2x  |
|   | Parker-Hannifin Corporation       | PH     | \$146.5       | \$18,803    | -29%     | 6%               | -3%            | 14.8x         | 12.8x   | 3.0x  |
| Air Freight & Logistics                       | United Parcel Service, Inc. Class | UPS    | \$87.2        | \$61,208    | -26%     | 6%               | 7%             | 11.4x         | 10.8x   | 22.9x |
| Airlines                                      | United Airlines Holdings, Inc.    | UAL    | \$46.8        | \$11,599    | -47%     | 5%               | 6%             | 5.1x          | 3.6x    | 1.0x  |
|   | American Airlines Group, Inc.     | AAL    | \$14.8        | \$6,284     | -49%     | 5%               | 6%             | 7.8x          | 2.8x    | NA    |
| <b>Sector: Consumer Discretionary</b>         | Aptiv PLC                         | APTIV  | \$68.9        | \$17,592    | -27%     | 4%               | 5%             | 13.7x         | 13.7x   | 4.6x  |
| Auto Components                               | BorgWarner Inc.                   | BWA    | \$26.1        | \$5,377     | -40%     | -1%              | -3%            | 5.8x          | 6.5x    | 1.1x  |
| Household Durables                            | Newell Brands Inc                 | NWL    | \$13.7        | \$5,793     | -29%     | 7%               | -11%           | 42.0x         | 8.9x    | 1.2x  |
|   | Leggett & Platt, Incorporated     | LEG    | \$34          | \$4,501     | -33%     | 2%               | 0%             | 11.6x         | 13.3x   | 3.4x  |
| Leisure Products                              | Hasbro, Inc.                      | HAS    | \$66.2        | \$9,065     | -37%     | 33%              | 12%            | 15.6x         | 14.5x   | 3.0x  |
| Textiles Apparel & Luxury Goods               | Tapestry, Inc.                    | TPR    | \$18.4        | \$5,087     | -32%     | 1%               | -1%            | 8.7x          | 7.4x    | 1.5x  |
|   | Capri Holdings Limited            | CPRI   | \$20.2        | \$3,019     | -47%     | 2%               | 11%            | 9.9x          | 4.1x    | 1.2x  |
|   | Ralph Lauren Corporation Class    | RL     | \$95.0        | \$4,641     | -19%     | 2%               | 4%             | 8.2x          | 11.1x   | 2.2x  |
|   | Under Armour, Inc. Class A        | UA     | \$11.2        | \$2,103     | -48%     | -2%              | -52%           | 17.4x         | 68.2x   | 2.3x  |
| Hotels Restaurants & Leisure                  | Royal Caribbean Cruises Ltd.      | RCL    | \$48.3        | \$10,088    | -64%     | 9%               | 8%             | 11.6x         | 4.7x    | 0.8x  |
|   | Norwegian Cruise Line Holdings    | NCLH   | \$19.8        | \$4,224     | -66%     | 7%               | -12%           | 10.4x         | 4.4x    | 0.6x  |
|   | Las Vegas Sands Corp.             | LVS    | \$49.7        | \$37,925    | -28%     | -3%              | -3%            | 12.7x         | 15.7x   | 7.3x  |
|   | Hilton Worldwide Holdings Inc     | HLT    | \$86.2        | \$23,910    | -22%     | 5%               | 12%            | 18.5x         | 19.7x   | NA    |
|   | MGM Resorts International         | MGM    | \$17.9        | \$8,805     | -46%     | -2%              | -76%           | 6.5x          | 19.2x   | 1.2x  |
|   | Wynn Resorts, Limited             | WYNN   | \$81.9        | \$8,809     | -41%     | 1%               | 10%            | 12.7x         | 18.2x   | 5.0x  |
|   | Starbucks Corporation             | SBUX   | \$70.8        | \$83,133    | -19%     | 8%               | 9%             | 19.8x         | 22.7x   | NA    |
| Internet & Direct Marketing Retail            | Expedia Group, Inc.               | EXPE   | \$86.3        | \$11,604    | -20%     | 6%               | 26%            | 9.5x          | 11.2x   | 3.1x  |
| Multiline Retail                              | Macy's Inc                        | M      | \$10.4        | \$3,223     | -39%     | -3%              | -16%           | 5.1x          | 4.3x    | 0.5x  |
| <b>Sector: Consumer Staples</b>               | Tyson Foods, Inc. Class A         | TSN    | \$60.9        | \$17,961    | -33%     | 6%               | 22%            | 11.2x         | 9.0x    | 1.5x  |
| Personal Products                             | Estee Lauder Companies Inc. Cl    | EL     | \$177.9       | \$39,551    | -14%     | 8%               | 6%             | 28.7x         | 28.0x   | 14.0x |
| <b>Sector: Information Technology</b>         | Mastercard Incorporated Class A   | MA     | \$262.0       | \$260,512   | -12%     | 19%              | 20%            | 29.5x         | 28.0x   | 44.8x |
| Technology Hardware Storage & Peripherals     | Apple Inc.                        | AAPL   | \$266.2       | \$1,164,622 | -9%      | 10%              | 15%            | 15.0x         | 18.2x   | 13.0x |
| Electronic Equipment Instruments & Components | IPG Photonics Corporation         | IPGP   | \$116.9       | \$6,204     | -19%     | -3%              | -7%            | 18.7x         | 30.2x   | 2.6x  |
| Semiconductors & Semiconductor Equipment      | KLA Corporation                   | KLAC   | \$144.9       | \$22,719    | -19%     | 13%              | 27%            | 16.6x         | 13.1x   | 8.5x  |
|   | Applied Materials, Inc.           | AMAT   | \$52.1        | \$47,816    | -15%     | 19%              | 37%            | 15.1x         | 11.8x   | 5.5x  |
|   | Lam Research Corporation          | LRCX   | \$267.6       | \$38,949    | -8%      | 21%              | 34%            | 15.4x         | 13.8x   | 8.7x  |
|   | Microchip Technology Incorporated | MCHP   | \$78.0        | \$18,674    | -26%     | 7%               | 13%            | 17.6x         | 12.2x   | 3.3x  |
|   | Micron Technology, Inc.           | MU     | \$46.0        | \$51,067    | -15%     | 13%              | 11%            | 5.4x          | 10.9x   | 1.4x  |
| <b>Sector: Communication Services</b>         | AMC Entertainment Holdings, Inc   | AMC    | \$3.9         | \$202       | -47%     | -1%              | Neg            | 6.8x          | Neg     | 0.3x  |
| <b>Sector: Real Estate</b>                    | Host Hotels & Resorts, Inc.       | HST    | \$12.1        | \$8,520     | -35%     | -4%              | -44%           | 10.6x         | 17.2x   | 1.2x  |

Source: J.P. Morgan US Equity Strategy and Quantitative Research, Bloomberg, IBES, Reuters, Factset



## J.P. Morgan Global Trade & COVID-19 Outperformers Basket (JPAMCVSO <Index>)

**Criteria:** The COVID-19-sensitive (outperformers) basket constitutes stocks that are key beneficiaries in the event of further outbreak. The stocks had higher discussions around the virus in their corporate call transcripts and are the outperformers in the recent COVID-19-related sell-off. We further excluded the stocks with high idiosyncratic performance.

Figure 19: J.P. Morgan COVID-19 Outperformers Basket (JPAMCVSO <Index>)

Priced as of 3/9/2020

| GICS Sector/Industry                          | Company                           | Ticker | Company Stats |            |          | IBES Estimates   |                | Valuation      |         |        |
|---|-----------------------------------|--------|---------------|------------|----------|------------------|----------------|----------------|---------|--------|
|   |                                   |        | Current Price | Market Cap | YTD Perf | Sales Growth NTM | EPS Growth NTM | EV/ EBITDA LTM | P/E NTM | P/B    |
| <b>Sector: Materials</b>                      | Ecolab Inc.                       | ECL    | \$183.8       | \$52,976   | -5%      | 2%               | 12%            | 20.2x          | 28.3x   | 6.1x   |
| <b>Sector: Industrials</b>                    | Alpha Pro Tech, Ltd.              | APT    | \$11.7        | \$150      | 241%     | —                | —              | 9.6x           | NA      | 4.5x   |
| <b>Sector: Consumer Discretionary</b>         | Lakeland Industries, Inc.         | LAKE   | \$14.3        | \$115      | 33%      | —                | —              | 16.3x          | NA      | 1.4x   |
| <b>Sector: Consumer Staples</b>               | Colgate-Palmolive Company         | CL     | \$70.0        | \$59,844   | 2%       | 5%               | 7%             | 15.8x          | 23.2x   | 511.3x |
| Household Products                            | Clorox Company                    | CLX    | \$174.9       | \$21,880   | 14%      | 3%               | 1%             | 16.7x          | 27.1x   | 39.4x  |
|   | Church & Dwight Co., Inc.         | CHD    | \$70.7        | \$17,378   | 1%       | 7%               | 10%            | 18.6x          | 26.0x   | 6.5x   |
| <b>Sector: Health Care</b>                    | Becton, Dickinson and Company     | BDX    | \$230.8       | \$62,581   | -15%     | 4%               | 9%             | 26.6x          | 18.3x   | 3.0x   |
| Health Care Providers & Services              | Laboratory Corporation of America | LH     | \$176.1       | \$17,134   | 4%       | 5%               | 8%             | 10.0x          | 14.5x   | 2.3x   |
| Biotechnology                                 | Regeneron Pharmaceuticals, Inc.   | REGN   | \$474.4       | \$51,321   | 26%      | 14%              | 16%            | 14.7x          | 16.6x   | 4.7x   |
|   | Gilead Sciences, Inc.             | GILD   | \$73.5        | \$92,903   | 13%      | 0%               | -4%            | 14.0x          | 11.5x   | 4.1x   |
|   | Moderna, Inc.                     | MRNA   | \$24.3        | \$8,954    | 24%      | 43%              | Neg            | NA             | Neg     | 6.9x   |
| Pharmaceuticals                               | Johnson & Johnson                 | JNJ    | \$136.4       | \$359,704  | -6%      | 6%               | 6%             | 14.3x          | 14.9x   | 6.0x   |
|   | Merck & Co., Inc.                 | MRK    | \$79          | \$200,264  | -13%     | 7%               | 13%            | 15.9x          | 13.5x   | 7.7x   |
|   | Pfizer Inc.                       | PFE    | \$33.8        | \$187,288  | -14%     | -3%              | 0%             | 9.4x           | 11.5x   | 3.0x   |
| <b>Sector: Financials</b>                     | CME Group Inc. Class A            | CME    | \$204.9       | \$73,440   | 2%       | 7%               | 10%            | 23.8x          | 27.3x   | 2.8x   |
| Capital Markets                               | Cboe Global Markets Inc           | CBOE   | \$111.8       | \$12,343   | -7%      | 9%               | 6%             | 19.1x          | 22.2x   | 3.7x   |
| <b>Sector: Information Technology</b>         | Garner, Inc.                      | IT     | \$110.1       | \$9,812    | -29%     | 12%              | 7%             | 24.1x          | 26.3x   | 10.5x  |
| IT Services                                   | Leidos Holdings, Inc.             | LDOS   | \$97.5        | \$13,791   | 0%       | 19%              | 13%            | 13.0x          | 16.7x   | 4.0x   |
| Software                                      | salesforce.com, inc.              | CRM    | \$151.2       | \$135,333  | -7%      | 27%              | 10%            | 48.2x          | 45.7x   | 4.0x   |
|   | Zoom Video Communications, Inc    | ZM     | \$113.8       | \$12,717   | 67%      | —                | —              | 605.6x         | 244.0x  | 37.7x  |
| Electronic Equipment Instruments & Components | TE Connectivity Ltd.              | TEL    | \$74.1        | \$24,773   | -23%     | 0%               | 0%             | 13.3x          | 13.5x   | 2.3x   |

Source: J.P. Morgan US Equity Strategy and Quantitative Research, Bloomberg, IBES, Reuters, Factset

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