

Market Update:

Some light at the end of the tunnel? *The crisis enters a new phase*

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After a drop of 34% into last Monday's low, followed by intense rallies in three of the next four days, some wonder if we are already emerging from the shortest bear market in history. We don't believe that there is sufficient evidence of that, although we appear to have entered a new phase of the crisis. One thing, though, is certain. The market's response to COVID-19 and its still unknown impact on the economy is massive. In only five weeks, this bear market has already tied for the tenth most damaging of the past 140 years.

Last week's abrupt reversal in stocks and other risk assets no doubt drew strength from at least three sources. First, an avalanche of support for the economy has been applied in the form of emergency rate cuts, fiscal relief and specific backstops designed to keep credit flowing and markets from seizing up. Second, valuations for risk assets have improved very significantly from levels prior to the collapse, and for many that may have been enough to trigger rebalancing programs or even to encourage some targeted bottom fishing. Finally, panic selling and forced liquidation by leveraged players may finally be dissipating.

Analysis of local and regional outbreaks beginning with China and moving through South Korea, Europe, the U.K. and now North America indicates a wide range of experiences in terms of intensity, mortality and duration. Moreover, little is known about the threat of triggering a new cycle as economies restart and the promise of a vaccine or even highly effective treatment is in the distance. Until more of these spaces are filled in, the ultimate scale of damage to the economy in terms of human suffering, lost production and the duration of the global recession is really all guesswork.

Eric Lascelles, RBC GAM's Chief Economist, is working with a base case for U.S. GDP of a 15% drop in output over a 10-week span and then fairly rapid recovery. In that scenario, average annual growth for 2020 will fall to -3%. For Canada, he expects average annual growth of -4% and similar levels globally. Slightly weaker growth forecasts for outside the U.S. reflect differences in economic structure, not the relative impact of the health crisis within each country. Importantly, after a

period of rapid and substantial revisions during February and early March, these forecasts have hardly budged in almost two weeks.

An epic amount of aid

Lessons learned through the global financial crisis of 2008/2009 have no doubt dampened the immediate impact of the COVID-19 crisis and, hopefully, limited the threat of a liquidity crunch spiraling into a solvency panic as firms are shuttered and employees are furloughed. Rapid, coordinated interest rate cuts take pressure off borrowers and, perhaps even more importantly, signal that central bankers have the economy's back. Emergency cuts of 150 basis points by both the Fed and Bank of Canada have dropped short-term interest rates close to the zero bound. To calm the financial crisis, the U.S. injected fiscal stimulus totaling \$1.64T or 11% of GDP.¹ This time, the fiscal stimulus already totals \$2.14T or 9.8% of GDP. In Canada, the federal government has announced relief programs totaling 4.7% of GDP, and in the U.K. the numbers are even larger than the U.S. at 16.3% of GDP, with 65 basis points of rate cuts alongside.

All of this has been put in place in only a 5-week span as monetary and fiscal authorities recall that speed and massive scale – shock and awe – were critical to stemming the tide of the financial crisis. Moreover, in both Canada and the U.S., several programs are open-ended and nowhere is there a sense that the wherewithal to fight the crisis is tapping out.

¹ Wall Street Journal, March 26, 2020, *Coronavirus Stimulus Takes Lessons from Tarp*, Greg IP and Jacob M. Schlesinger

Fixed income market valuations redrawn

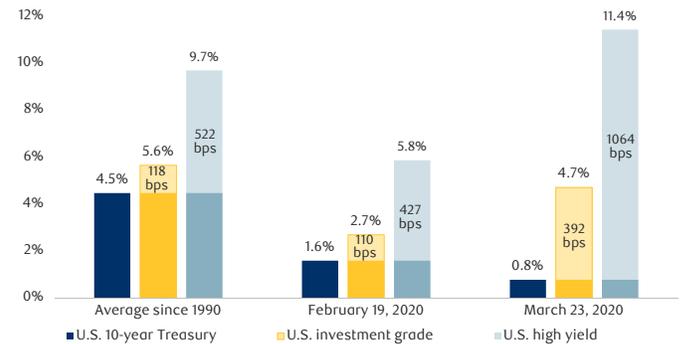
Valuations in fixed income and equity markets are now drawing close attention. Exhibit 1 presents the U.S. 10-year T-Bond yield alongside those for investment grade (IG) and high yield (HYC) corporate bonds for three periods: the past 30-year average, levels on the eve of this bear market and at the March 23 stock market trough. The lightly coloured areas within the bars indicate the yield spread, or risk premium, embedded in these bonds versus the near-riskless sovereign alternative. The change in both the absolute level of yields and credit spreads between February 19 and March 23 is nothing short of awesome. Coming from rock bottom levels and with credit spreads at their narrowest in two decades, yields on investment grade bonds have ratcheted up to approach their long-term average. Even more impressive is the spike in the high yield bond market. Yields for these more leveraged credits moved from 390 basis points below the long-term average to 150 above in only three weeks! As intense risk aversion cut government bond yields by half through this brief period, credit spreads – the premium paid for accepting corporate default risk – almost quadrupled to 392 basis points for the IG market and more than doubled to 1,064 basis points for high yield bonds, moving both to compelling levels relative to the past 30 years.

Stocks pummeled below fair value

Stock valuations, too, have reset. Exhibit 2 plots the U.S. equity market against its range of fair value, solved as a function of normalized earnings and valuations consistent with underlying inflation and interest rates. After crawling above the band's midpoint in late 2018/early 2019, the bear market has pushed the S&P 500 into the bottom half of our fair value channel – the area the index spent most of its time during the long bull market that followed the financial crisis and the valuation range that typically provides among the highest and most consistent results coupled with the lowest average volatility.

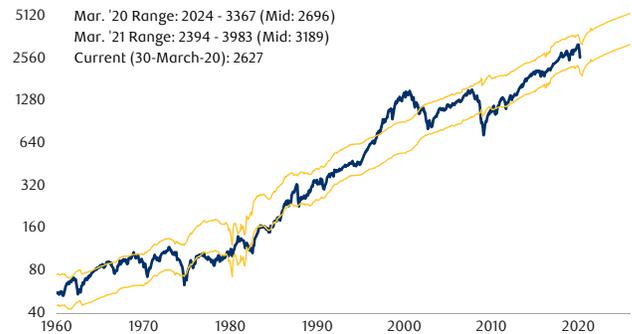
Of course, current valuations are only part of the puzzle as stock prices are also a function of corporate profits. While never easy, forecasting companies' earnings with any degree of certainty would seem close to impossible with large segments of the economy shut down for an indefinite period. Exhibit 3 plots the monthly progression of the consensus among sell side analysts for the S&P 500 earnings pool for this year and next. The most recent estimate for the U.S. market has fallen to \$160 for 2020, down from \$172 just before the crisis and about \$180 as the year began. The cuts are not only deep, but also broad, with earnings estimates for 84% of companies in decline, close to the worst experience during 2008/2009.

Exhibit 1: Yield to maturity



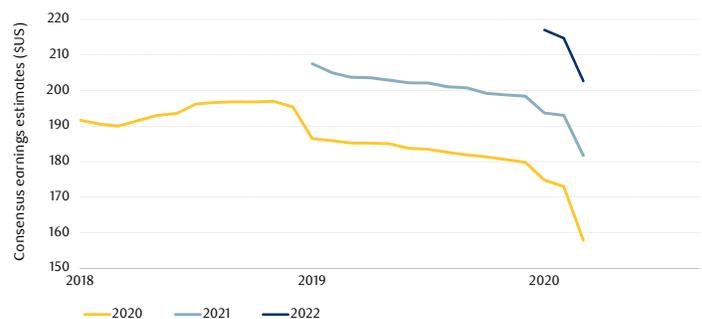
Note: As of March 30, 2020. Shaded areas within the bars indicate the yield spread versus the U.S. 10-year Treasury bond yield. Source: ICE BofAML, RBC GAM

Exhibit 2: S&P 500 fair value Normalized earnings & valuations



Note: As of March 30, 2020. Fair value estimates are for illustrative purposes only. Corrections are always a possibility and valuations will not limit the risk of damage from systemic shocks. It is not possible to invest directly in an unmanaged index. Source: RBC GAM

Exhibit 3: S&P 500 Index Consensus earnings estimates



Note: As of March 30, 2020. Source: Thomson Reuters, Bloomberg

Exhibit 4 presents a much more useful method of estimating the future earnings of listed companies. The volatile line on the chart traces the reported earnings of S&P 500 constituents – the same number as that being forecast by the sell side analysts noted above. The dotted line passing through that series is simply the earnings that would be produced if profits grew every year at their long-term average of 5.9%. We refer to this as normalized earnings and a variant of that number anchors our fair value analysis. It's particularly useful right now because we have no way of knowing how deep the impact of the shutdown will be or how long it will remain in place. We do, though, recognize that earnings have always returned to their trendline level following every prior crisis, recession or disruption of any kind. That's because the ingenuity and productive capacity that pumped out those profits will survive and normalcy will ultimately be restored. The current level for normalized S&P 500 earnings is \$152.56. At a multiple of 18.1 – the price earnings ratio historically consistent with current and expected interest rates and inflation – the S&P 500 is fairly valued around 2,700 and rises to approximately 3,200 a year from now.

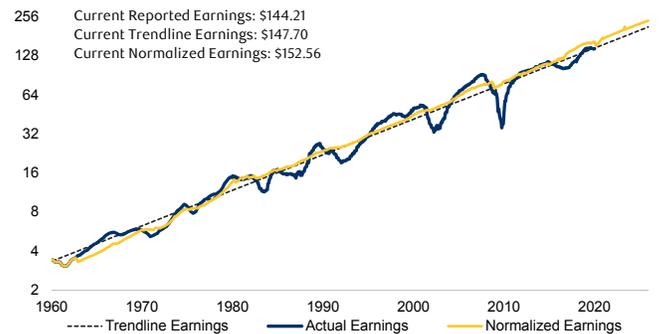
We have similar fair value models for 8 of the world's largest markets. While the S&P 500 currently lies 3% below its current normalized fair value and 18% below that level one year forward, global markets are even more attractive on this basis. Exhibit 5 presents our composite of the distance that each of these markets lies above or below fair value, with the contribution from each country weighted by its GDP. Although nowhere near the 45% discount to global fair value of 2009, at -17.6% the latest plot shows the world's stock markets to be already back at attractive valuation levels.

Light at the end of the tunnel?

Unfortunately, comparing current valuations to their history does not tell us much about when we might expect a sustained reversal to the upside in equities or other risk assets. Solid gains for stocks and spread compression in the corporate bond market in three of the past four trading days are welcome, but we know that the list of the best trading days in history is littered with relief rallies during ongoing bear markets. There may be, though, some glimmers of light.

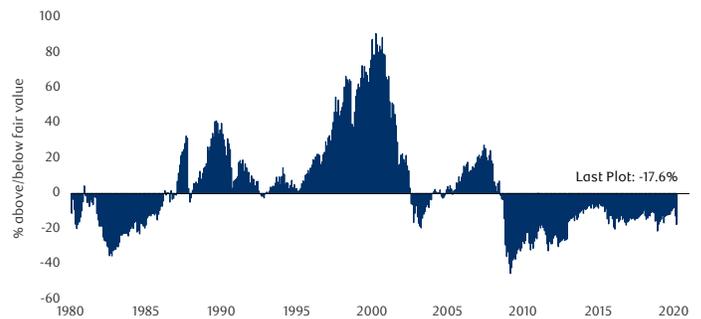
Among these is a sizeable shift in equity investors' confidence. Exhibit 6 captures the incidence of bearish sentiment among those responding to the weekly survey of the American Association of Individual Investors (AII). These surveys are not as robust or comprehensive as one might wish, but they have in the past provided a good lens into the balance of greed vs. fear that traverses a fairly predictable cycle. Long periods of winning typically stokes confidence

Exhibit 4: S&P 500 earnings Reported and normalized earnings



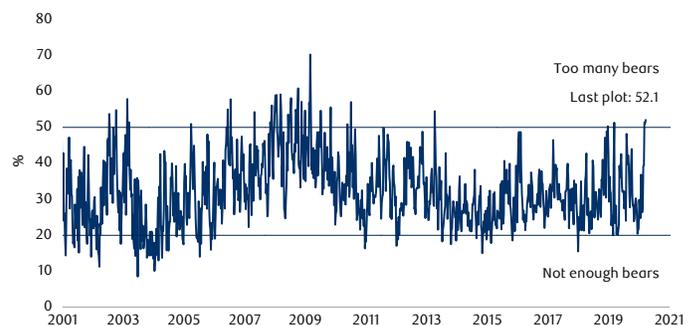
Note: As of March 30, 2020. Source: RBC GAM, RBC Capital Markets

Exhibit 5: Global stock market composite Equity market indexes relative to equilibrium



Note: As of March 30, 2020. Source: RBC GAM

Exhibit 6: AII sentiment survey Percent bearish



Note: As of March 26, 2020. Source: American Association of Individual Investors (AII)

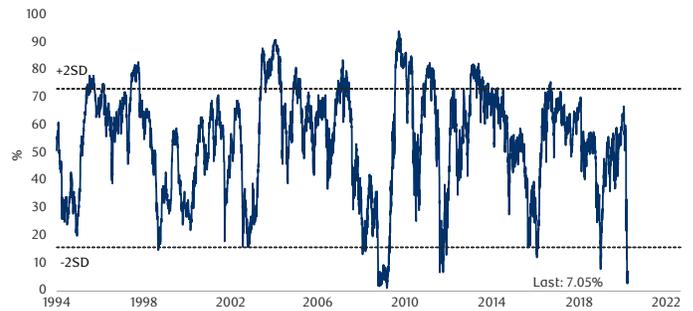
in the future, even though logic suggests that rising stock prices must at some point limit the potential for future gains. The opposite is true for falling markets. Last week the consensus rose above 50% bears, just into the range that has frequently signaled sustained moves higher for stocks. That said, the companion survey of those expressing a bullish outlook is not yet at an extreme level and other measures of market sentiment show concern, but not yet the level of fear consistent with the end of a bear market.

Price momentum is another tool that is frequently useful in identifying turning points in markets. Exhibit 7 plots the percent of NYSE stocks trading above or below their prior 200-day moving average price. Similarly, exhibit 8 presents the share of stocks with rising price momentum (a measure of the rate of change of share prices). In both, March's steep correction pulled these measures near their lowest levels in almost four decades, exceeded only by the worst days of the 2008/2009 experience and even then, just by a bit. Selling pressure may be nearing exhaustion.

We constantly review economic sectors within the stock market for signs of emerging strength or weakness. Exhibit 9 features the relative price for two S&P GICS sectors most exposed to the crisis to that of the S&P 500 (ie: GICS price index level divided by S&P 500 index level). A falling line indicates the sector is underperforming the market and a rising line defines leadership. No one will be surprised that airlines, hotels, resorts and cruise lines lost ground to others during the steep decline into the market's March 23 low. It is interesting to note, though, that each of these groups have actually bounced off the bottom a little faster than the average, perhaps indicating faith in the efficacy of recently announced government support plans and the improved chance for these hard hit industries to survive the crisis.

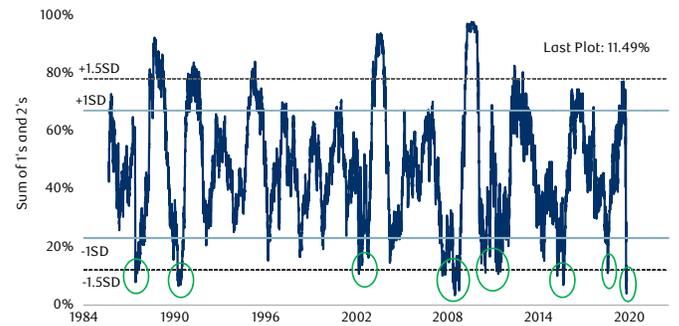
Similarly, we also have our eye on the types of investment factors and styles that have led through the decline and brief recovery period. Think of these as groupings of characteristics that exist within each company, but in varying degrees. Some might exhibit high growth in earnings or revenues. Others are differentiated by being small or large in terms of market capitalization. Just as investors rotate their preferences for certain economic sectors over others (say banks vs. energy), over time specific factors and styles move up and down in leadership. These movements can provide a lens into investor activity and motivation, in many cases providing a sense of what lies ahead for markets.

Exhibit 7: New York Stock Exchange
% of stocks above their 200-day moving average



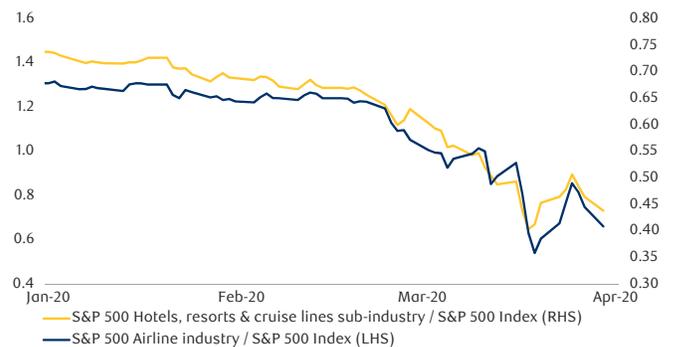
Note: As of March 30, 2020. Source: Bloomberg, RBC GAM

Exhibit 8: S&P 500 Index
Monthly price momentum



Note: As of March 30, 2020. Source: RBC GAM

Exhibit 9: S&P 500 sector relative performance



Note: As of March 30, 2020. Source: RBC GAM

Exhibit 10 captures the performance of 11 investment style factors through the drop in stocks from February 19 to March 23 and for the first day and week of recovery since then. At -7.5%, beta dominated returns during the steep decline. The beta factor captures the movement that comes simply from being a listed stock (think a rising tide floats all ships, but in this case the opposite). Among other high impact factors through the crash phase, both negative, were leverage at -2.8% and liquidity at -1.8%. Considering the root of the crisis, it's not surprising that highly leveraged and illiquid stocks were among the biggest losers. What is surprising is that the beta factor was 2.5 to 3.5 times as powerful.

Why did beta dominate the desire to unload leveraged and illiquid situations? Maybe because the most motivated selling reflected a desire to simply get out of the stock market. The rush to the exit was led by panicked shareowners and by forced selling resulting from contractual obligations such as margin calls. It's quite possible that these same motivated sellers would have preferred to dump their most leveraged and illiquid stocks, but their primary focus was to sell something and bids were almost certainly scarce in those areas, and very unlikely of the size available elsewhere in the broad market.

Through the past week, though, beta has again been the leading factor, although this time in recovery as investors scrambled back in. Leverage and liquidity are still generating negative returns, but the value factor of earnings yield (stocks with below average P/E ratios) has joined momentum (companies with a solid recent price trend) as leading and positive factors. Value frequently moves to the front through the early days of a bull market, so the emergence of earnings yield as a leading style is worth watching.

Where to from here?

The rapid appearance of near-zero interest rates and extraordinary support programs should be enough to stop the economy's freefall. And the new lower levels of valuations may have begun to bring bids back into the markets. Nevertheless, the COVID-19 case count continues to climb globally and is still accelerating in the U.K., U.S. and Canada. The next few weeks are sure to bring challenging news to markets. A disciplined approach to security selection and managing portfolios is never more important.

Exhibit 10: Barra global style factor returns

Factor	Peak-Trough Feb. 20, 2020 – Mar. 23, 2020	Mar. 24, 2020	Mar. 24, 2020 – Mar. 30, 2020
Size	1.5%	0.6%	0.4%
Growth	0.1%	-0.1%	-0.1%
Earnings yield	-0.2%	0.4%	0.8%
Momentum	-0.2%	-0.1%	0.7%
Size nonlinear	-0.4%	0.2%	0.7%
Book to Price	-1.2%	-0.5%	-0.9%
Dividend Yield	-1.6%	-0.2%	0.1%
Liquidity	-1.8%	0.3%	-0.7%
Residual Volatility	-2.3%	0.0%	0.2%
Leverage	-2.8%	-0.1%	-0.4%
Beta	-7.5%	3.6%	4.5%

Note: As of March 30, 2020. Source: MSCI, RBC GAM

One way of thinking about this is to project returns for the stock market based on the time it will take for earnings to move back to their normalized level. An optimistic view might peg the recovery period at a year, and assuming a “normal” P/E ratio at that time of 18.9, project a total return for stocks of 12.1%. A more cautious approach is to stretch that recovery out over, say, three or even four years, reducing compound annual total returns to 4.1% to 5.5% – decent but not exceptional.

We also have in mind the long term. As we mentioned in our Market update on March 13, 2020, structural change in the global economy seems likely to hold sovereign interest rates at historically low levels for many years ahead. Some bounce back in yields can be expected when the crisis clears, but unlikely to levels reflected in the assumed rates of return embedded in pension and other long-term savings plans. Achieving the goals these plans were designed for will require an active, opportunistic approach to asset management. This period of massive disruption has already offered chances to build positions in risk assets at prices that will improve long-term outcomes for patient, disciplined investors.

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