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Marketing Material

S&P 500 SURGE REQUIRES A FULL AND FAST EPS RECOVERY TO JUSTIFY



S&P 500 forward P/E surges to well over 21, eclipsed only by the Tech bubble.

_ Our P/E / Vix gauge shows that equity investors are skeptical or in denial.

The offered equity risk premium shows there is little upside for S&P 500 P/E.

_ We believe that there is better valuation upside at IG corporate credit than equities.

_ Growth > Value supported by EPS outlook, small cap EPS outlook gloomy.

S&P 500 FORWARD P/E SURGES TO WELL OVER 21, ECLIPSED ONLY BY THE TECH BUBBLE

The V-shaped S&P 500 recovery has been unrelenting. We see this as disconnected from the much slower recovery we expect in gross domestic product (GDP) and S&P 500 earnings per share (EPS). While valuations can sometimes explain such S&P 500 vs. EPS or GDP disconnects, current valuations suggest a high dependence on a full and fast EPS recovery. On forward bottom-up consensus EPS, the S&P 500 price-to-earnings ratio (P/E) rose from 13x at its March 23 low to 22x now. Part of this P/E surge is from cuts to EPS for the next four quarters from the second quarter of 2020 to the first quarter of 2021. This high P/E would make sense if the forward EPS estimates represented a fourquarter cycle trough EPS. However, forward consensus S&P 500 EPS is 140 dollars, down from 170 dollars in February, but still too high in our view to represent trough or even the fourth quarter of 2020 annualized S&P 500 EPS after the "U.S. reopening" bounce. Our forward S&P 500 EPS estimate for the second quarter of 2020 to the first quarter of 2021 is 111 dollars. But this includes crushed second guarter 2020 EPS of 15 dollars. We put the fourth quarter 2020 S&P 500 EPS at 34 dollars or 135 dollars annualized. The S&P 500 now trades at 23x our annualized estimated fourth quarter 2020 EPS. Our 2021 estimated (E) S&P 500 EPS is 150 dollars. We only expect S&P 500 EPS to return to the 42 dollar level of the fourth quarter in 2019 in the fourth quarter of 2021. After the fourth quarter of 2021, we expect about 3% annual growth, to put 2022 S&P 500 EPS about 170 dollars.

High valuations are broad-based. The median stock forward P/E of S&P 500 is now 20.1x, also the highest ever observed outside of the Tech bubble. Such rich valuations usually occur in times of late cycle exuberance, not amidst

recovery or early cycle risks. Forward P/Es in 2002-2003 and 2009-2010, did not exceed 20 on what were still cyclically weak 2003-2004E or 2010-2011E consensus S&P 500 EPS.

OUR P/E / VIX GAUGE SHOWS THAT EQUITY INVESTORS ARE SKEPTICAL OR IN DENIAL

Our P/E / Vix gauge of market emotion is in a zone that is difficult to interpret. It suggests that there is conflict between a cash equity market that is confident in a strong recovery and yet an equity options market still in doubt. We view the way in which our P/E / Vix ratio entered the skeptical or denial range of 0.5-0.8 – with a well above normal P/E and yet a still very high Vix of 25-30 (albeit off of its extreme recent high of 80) vs. a normal 12-14 Vix – to be indicative of a cash equity market in denial of the challenges still ahead. It is more encouraging, and likely indicative of skepticism that will lead to a continued rally, when the P/E is at or a bit below normal and the Vix moderately above normal; such as a P/E of about 14-16 and a Vix of about 16-18.

The P/E / Vix being in the zone it is in today usually occurs before a market correction (when denial) or a strong rally (when skepticism). This P/E / Vix ratio is not sustainable, either the numerator or denominator will soon adjust. If the Vix reverts to normal at this P/E, then P/E / Vix will make its fastest trip ever from crash to mania.

All versions of our P/E / Vix ratio are in the skeptical or denial zone: (1) P/E / Vix ratio is 0.51 on trailing P/E of 18.3x and average Vix of 45 past three months: (2) P/E / Vix ratio is 0.65 on trailing P/E of 18.3x and current Vix of 28; (3) P/ E / Vix ratio is 0.74 on P/E of 20.6x on our estimated normalized 2020 S&P 500 EPS (145 dollars) and current 28 Vix.

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THE OFFERED EQUITY RISK PREMIUM SHOWS THERE IS LITTLE UPSIDE FOR S&P 500 P/E

Dislocations in rates complicate gauging the current S&P 500 equity risk premium (ERP). We estimate it is about 5.0% right now if 10-year Treasury Inflation Protected Securities (TIPS) yields stay at negative 50 basis points (bps), instead of the positive 50bps in 2017-2018, and using our 145-150 dollars equity time-value adjusted normalized 2020 S&P 500 EPS with non-generally accepted accounting principles (non-GAAP) EPS quality adjustments. Thus, to earn a 5% S&P 500 ERP over the long-term or a mere 4.5% total real return, S&P 500 EPS needs to be 150 dollars or better in 2021 and 10-year TIPS stay at -50bp. It is likely better to be in equities than bonds if yields climb, but if TIPS yields go back to 50bps then the ERP is only 4% at the current P/ E. Thus, we think the S&P 500 P/E is now dependent on negative real interest rates persisting and a fast EPS recovery.

BETTER VALUATION UPSIDE AT IG CORPORATE CREDIT THAN EQUITIES

GLOSSARY

One basis point equals 1/100 of a percentage point.

A **bubble** is characterized by prices surging higher than warranted by fundamentals, followed by a drastic drop in prices as a massive sell-off occurs.

The CBOE Volatility Index (Vix) is a trademarked ticker symbol for the Chicago Board Options Exchange Market Volatility Index. It is a popular measure of the volatility of the S&P 500 as implied in the short term option prices on the index.

A correction is a decline in stock market prices.

Cyclical is something that moves with the cycle.

Earnings per share (EPS) is calculated as a company's net income minus dividends of preferred stock, all divided by the total number of shares outstanding.

Generally accepted accounting principles, or GAAP, are a set of rules that encompass the details, complexities, and legalities of business and corporate accounting.

The gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

Growth stocks are stocks from companies that are expected to grow significantly above market average for a certain period of time.

Investment grade (IG) refers to a credit rating from a rating agency that indicates that a bond has a relatively low risk of default.

In statistics and probability theory, a median is the number separating the higher half of a data sample, a population, or a probability distribution, from the lower half.

The price-to-earnings (P/E) ratio compares a company's current share price to its earnings per share.

The real interest rate is the nominal interest rate adjusted for inflation as measured by the GDP deflator. Investment-grade (IG) corporate credit spreads are 195bps. A bit over 100bps is probably a fair spread in our view if the recovery is steady, which makes us believe that corporate bonds are still attractive. But we have a hard time seeing the ERP come down further, even if IG spreads decline against current base rates. S&P 500 EPS must significantly exceed 150 dollars as upside on a 20+ P/E of 2021 EPS seems limited.

GROWTH > VALUE SUPPORTED BY EPS OUTLOOK, SMALL CAP EPS OUTLOOK GLOOMY

Growth stocks outperformed value on both the leg down and the leg up, and the forward P/E multiple premium of growth over value is at all-time high. However the cyclical risks and EPS outlook make us believe no lasting rotation is likely to happen this year or next. If we compare the consensus forward 12-month EPS vs. a year ago, Russell 1000 Growth EPS is down only 7% while Russell 1000 Value is down 26%. Small-caps profits are hurt the most with their 2020 consensus EPS cut by 70% and 2021 EPS cut by 40% year to date. And we think further cuts are still quite possible.

The risk premium is the expected return on an investment minus the return that would be earned on a risk-free investment.

The Russell 1000 Growth Index states the performance of the companies included in the index that have higher price-to-book ratios and are forecasted with higher growth.

The Russell 1000 Value Index states the performance of the companies included in the index that have lower price-to-book ratios and are forecasted with lower growth.

The S&P 500 is an index that includes 500 leading U.S. companies capturing approximately 80% coverage of available U.S. market capitalization.

Small cap firms generally have a market capitalization of less than \$2 billion.

The spread is the difference between the quoted rates of return on two different investments, usually of different credit quality.

Treasury Inflation-Protected Securities (TIPS) are a form of U.S. Treasury bonds designed to protect investors against inflation. These bonds are indexed to inflation and pay investors a fixed interest rate as the bond's par value adjusts with the inflation rate.

The U.S. dollar (USD) is the official currency of the United States and its overseas territories.

Valuation attempts to quantify the attractiveness of an asset, for example through looking at a firm's stock price in relation to its earnings.

Value stocks are stocks from companies that are trading at prices close to their book value and that are therefore cheaper than the market average on that metric.

Yield is the income return on an investment referring to the interest or dividends received from a security and is usually expressed annually as a percentage based on the investment's cost, its current market value or its face value.

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