

## **Lee Technical Strategy Blog 03/16/20 - Fundamental vs Technical Levels**

### **Fundamental vs Technical Investment Approach**

Fundamental analysis is an investment discipline that analyzes securities and markets by determining the intrinsic value of the investment vehicle in question. Technical analysis, on the other hand, is another investment approach that attempts to forecast future price trends of securities and markets by means of charts, patterns, technical indicators, volume, and behavior finance/market psychology.

Many believe by utilizing both investment methodologies (technical and fundamental) investors would be better informed, more confident and more effective in the marketplace. With the turbulent financial markets and excessive market volatilities who would not want to be more knowledgeable and confident.

We will determine if there are common levels where the technical and fundamental disciplines converge. That is, the price level (SPX) from fundamental and technical perspectives will attract investors to return to lend support to the marketplace.

### **Fundamental Valuation:**

In fundamental analysis there are many different metrics used to value a security including Revenue, Sales, Earnings Per Share (EPS), P/E Ratio and various other fundamental ratios. We will focus exclusively on SPX Earnings (GAAP) as we believe the trailing twelve months of GAAP earnings per share for the S&P 500 Index (SPX) is generally more accurate and less optimistic than operating earnings which tends to exclude some expenses, thereby leading to the value appearing higher than expected.

Enclosed below is the monthly price chart of SPX dating back to the 1920s. Accompanying the SPX price chart are three SPX valuation levels show the SPX closing values would be if the P/E ratio was trading given the current Earnings Per Share (EPS) value. The three levels are: SPX P/E of 20 (overvalued), SPX P/E of 15 (fair value), and SPX P/E of 10 (undervalued).

Since 1925 it is rare for SPX to consistently maintain above its P/E of 20. The exception to this has been the late-1990s ahead of the Tech/Telcom dotcom bear of 2000-2002 and the 2016-2020 timeframe. At its 2/19/20 peak (3,393.52) SPX was extremely overvalued or nearly 1,335.5-points above what the SPX closing value (2,658) would be if the P/E ratio was at 20, given the current Earnings Per Share (EPS) value. We suspect that if the coronavirus escalates further SPX may be directly headed toward its fair value P/E of 15 or 1,993.50. If the pandemic reaches severe conditions and SPX breach fair value of 1,993.50, we may be looking at this index sliding toward undervalued levels which translates to P/E of 10 or SPX trading as low as 1,329.

### **Technical Support Levels:**

Enclosed below is an important technical analysis study that is based on number theory commonly referred as the Fibonacci sequence. Fibonacci sequence consists of a series of numbers: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34... The next number in the sequence is found by adding up the two numbers before it. The sequence moves toward a certain constant, or commonly referred to as the golden ratio of 1.618, or its inverse 0.618. In the Fibonacci sequence, any given number is then approximately 1.618 times the preceding number. Each number is also 0.618 of the number to the right of it.

Common Fibonacci numbers are created by taking the high and low points on a chart and applying the golden ratio to arrive at key Fibonacci retracement levels of 38.2%, 50%, and 61.8%. As a rule, after a major rally or a major decline it is common for a security or market to retrace a portion (38.25, 50% or 61.8%) of its gains or losses.

In an irrational market environment as represented by extreme volume, panic selling, wholesale selling and liquidation the Fibonacci retracement levels can act as crucial psychological comfort zones (support/resistance) where buyers or sellers are active. When vast numbers of investors and traders all converge at these key Fibonacci retracement levels, they can exert undue influence on the market leading to collective buying or selling pressure.

For your reference we have identified 3 key Fibonacci retracement zones that will become increasingly important in the days/weeks/months ahead. From the Mar 2009 SPX market bottom (666.79) to the Feb 2020 all-time high (3,339.52) a 38.2% retracement brings SPX to 2,351.91. Also note the Dec 2018 reaction low is also residing at 2,346.58. A decline from the Feb 2020 record high to these levels translate to a bear decline of -30.69% to -30.85%. This also correlates to an important risk tolerance threshold level. Typically, the ability of the market to find support at the 38.2% retracement zone suggests selling exhaustion. This would imply that this is another normal bear decline within the context of a sustainable structural bull and one that will likely lead to an economic recession.

The 50% retracement is not as important as the previous 38.2% retracement based on the Fibonacci sequence series. However, it is very easy to compute – you add the high and low and divide by 2 to arrive at the 50% level. The press and the media will likely report on this half-way mark but historically this level does not hold up as well as the other two retracement levels. Nonetheless, the 50% retracement converges near 2,030.15 or just below the 2015 reaction highs (2,116.5-2,135). A decline to 50% level would result in -40.18% placing this as a formidable bear decline. It is likely that this will lead to a U.S. recession albeit a modest and relatively abbreviated one.

The 61.8% retracement is by far the most important one based on the golden ratio principle. Most bear declines that are not structural bears will often stop near this retracement level. A 61.8% retracement brings SPX to 1,708.40. Note that the Oct 2014/Aug 2015/Feb 2016 reaction lows also coincide at 1,810-1,867. From the Feb 2020 high the 61.8% retracement would translate to -49.66% placing this as a severe/extreme bear decline. The magnitude and the duration (1-2

years) of the bear decline would likely lead to a U.S. and/or global recession and possibly a domestic and/or global financial/credit crisis. The ability to find support along the 61.8% retracement holds the key to a major bottom and the resumption of the structural bull trend. Violation of this pivotal level confirms the end to the structural bull and the start of the next structural bear decline (8-20 years) consisting of countertrend but unsustainable cyclical bull rallies (1-2 years) followed by the resumption of the structural bear trend.

**Conclusion:**

Fundamentally speaking, SPX is overvalued when it is trading above a P/E of 20 which translates to a SPX price of 2,658. It is trading at fair value when it has a P/E of 15 or SPX price of 1,993.50. And it is undervalued with a P/E of 10 or SPX price near 1,329. A base case scenario would imply SPX is likely to fall further possibly toward its fair value of 1,994.50 before fundamental buyers return with conviction. From a technical perspective, 2,351.91 or the 38.2% retracement from 2009-2020 rally is key support. Failure to maintain this support warns of the next decline toward the 50% retracement or 2,030 which coincides closely with the fundamental SPX P/E of 15 or fair valued price of 1,993.50. Under extreme conditions or worse-case scenario as represented by a deep or prolonged U.S. recession or global recession and/or financial/credit crisis SPX is expected to decline fundamentally toward its undervalued level or P/E of 10, which suggests SPX of 1,329 or -60.84% from its Feb 2020 high. From a technical basis, the 61.8% retracement of 1,780 or -59.66%, would define the threshold of a severe cyclical bear decline within the context of an ongoing structural bull market (2009-present).



16-Mar-2020

Open 2508.59 High 2562.98 Low 2380.94 Close 2386.13 Volume 4.6B Chg -324.89 (-11.98%)

\$SPX (Daily) 2386.13

MA(50) 3180.43

MA(200) 3047.16

Volume 4,633,577,472

**Support 1 = 2,347-2,352 (Dec 2018 reaction low and 38.2% retracement from 2009-2020 rally)**

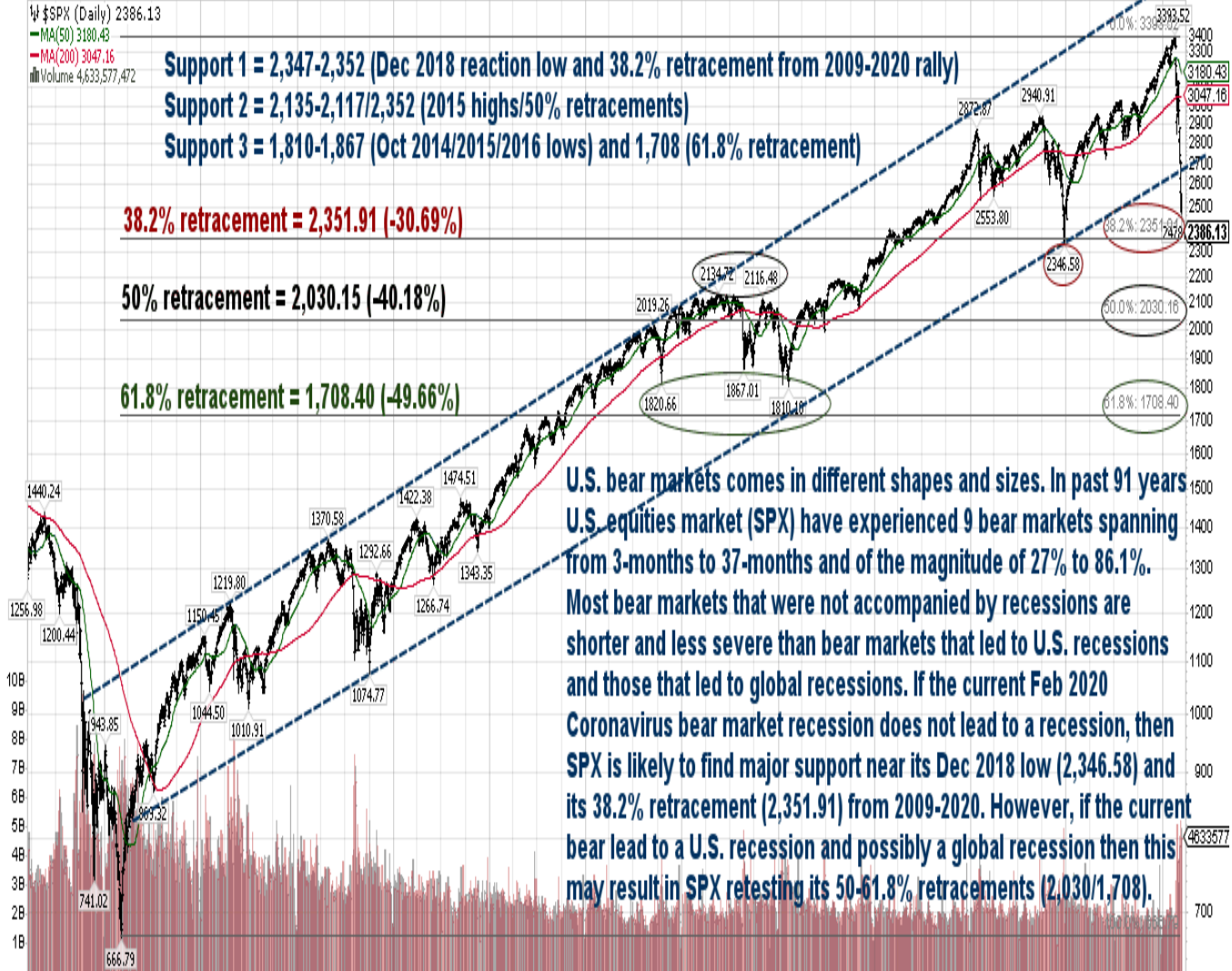
**Support 2 = 2,135-2,117/2,352 (2015 highs/50% retracements)**

**Support 3 = 1,810-1,867 (Oct 2014/2015/2016 lows) and 1,708 (61.8% retracement)**

**38.2% retracement = 2,351.91 (-30.69%)**

**50% retracement = 2,030.15 (-40.18%)**

**61.8% retracement = 1,708.40 (-49.66%)**



**U.S. bear markets comes in different shapes and sizes. In past 91 years U.S. equities market (SPX) have experienced 9 bear markets spanning from 3-months to 37-months and of the magnitude of 27% to 86.1%. Most bear markets that were not accompanied by recessions are shorter and less severe than bear markets that led to U.S. recessions and those that led to global recessions. If the current Feb 2020 Coronavirus bear market recession does not lead to a recession, then SPX is likely to find major support near its Dec 2018 low (2,346.58) and its 38.2% retracement (2,351.91) from 2009-2020. However, if the current bear lead to a U.S. recession and possibly a global recession then this may result in SPX retesting its 50-61.8% retracements (2,030/1,708).**

Apr Jul Oct 09 Apr Jul Oct 10 Apr Jul Oct 11 Apr Jul Oct 12 Apr Jul Oct 13 Apr Jul Oct 14 Apr Jul Oct 15 Apr Jul Oct 16 Apr Jul Oct 17 Apr Jul Oct 18 Apr Jul Oct 19 Apr Jul Oct 20