?Peter Cook is the author of the ***?Is That True??•****series of articles, which help explain the many statements and theories circulating in the mainstream financial media often presented as ?truths.? The motives and psychology of market participants, which drives the difference between truth and partial-truth, are explored.?*

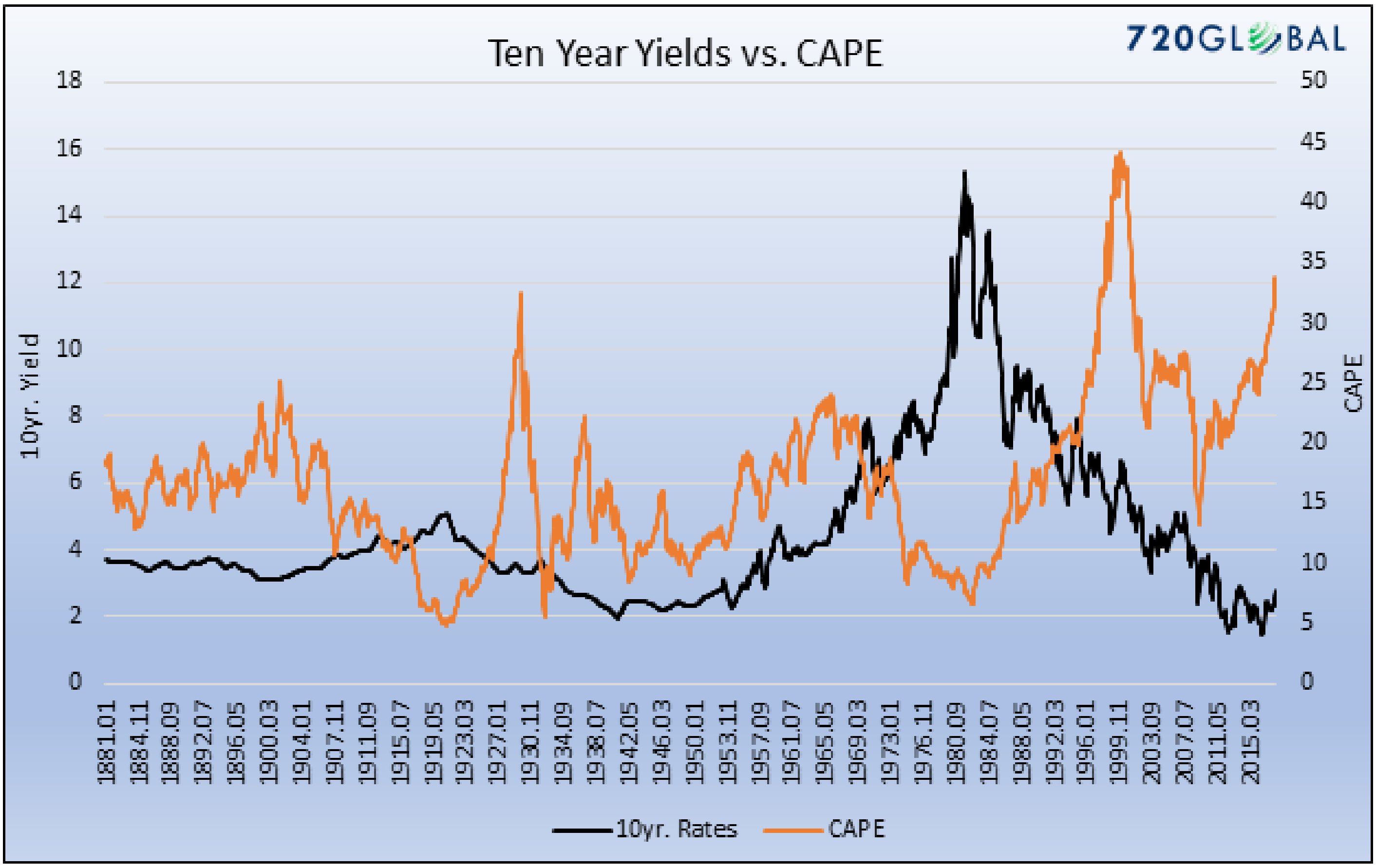
Summing up the current conventional wisdom:

1. *Global GDP growth has bottomed and is accelerating systematically higher,*
2. *Which will cause the inflation rate to accelerate higher.*
3. *Bond markets hate higher inflation, so interest rates have bottomed and will move even higher.*
4. *The stock market, dependent on low rates for high valuations, will fall if rates move higher,*
5. *Which is why the stock market peaked on January 26, 2018, and then declined dramatically,*
6. *Ushering in an era of systematically higher volatility*

In our last article [?GDP Growth Driving Rates Higher!? ? Is That True?](), we tackled the first three bullet points above, critiquing whether the current conventional wisdom contains flaws.• A review of the data showed that the main global economic zones (US, Eurozone, China, Japan) are growing more slowly than they did 10-20 years ago, and that GDP growth in each of those zones is currently within the range of GDP growth since 2008. ••Further, debt and demographics have and will continue to constrain GDP growth and inflation in each of those zones. •So it is difficult to see why GDP growth and inflation would shift into a higher gear. If this view is correct, the recent rise in US long-term interest rates will not persist, at least based on economic fundamentals alone.• More likely, the recent rise in US long-term rates may be a transitory event based on the short-term behaviors of market participants who seek to ?call the bottom? in interest rates and act on that belief.• Or, the rise in rates could be the beginning of credit risk being priced into US Treasury bonds, the result of simultaneous experiments of unwinding of QE while undertaking a borrowing binge during a time in which the ratio of debt to GDP is greater than 100%.• Neither of those has been previously attempted, let alone at the same time. Below we tackle bullet points four through six, in which the consensus view is that rising interest rates must cause a decline in stock prices.• Specifically, this line of logic connects the dramatic fall in stock prices after January 26, 2018 with the recent rise in interest rates.• Further, it is believed that the rise in rates and the explosion in volatility (VIX index) will usher in an era of systematically stock market volatility, and quite possibly, economic uncertainty.

Stocks Will Fall If Rates Move Higher

In a previous article the data since 1880 showed that extremely high stock market valuations have occurred when interest rates weren?t at secular lows (1929 and 2000), which debunks today?s highly-confident narrative that stocks are high **because of** low interest rates.• The graphic evidence is shown below.



*Source:• Robert Shiller*Extending that logic, stock prices shouldn?t necessarily fall **because of** a rise in interest rates from low levels.• But that logic certainly isn?t supported by the consensus belief that a rise in rates will cause stock market prices to fall. So if the experience of 140 years of data isn?t your cup of tea, then maybe more recent experience will be persuasive.• Since 2009, there have been five episodes of sharply-rising long-term interest rates, and each time stock prices didn?t fall; they rose.•• The data below uses the price change of TLT, the 20+ year bond ETF, compared to the price change in the S&P 500 index. **Calendar Year 2009**

- Bonds ••-22%
- SPX ••+10

June 2012-December 2013

- Bonds ••••••-20%
- SPX ••••••+35

1H 2015

- Bonds •••••••••••-16%
- SPX ••••••••••+ 1

2H 2016

- Bonds ••••••-15%
- SPX •••••••+ 7%

Dec 15, 2017-Feb 2018

- Bonds •••••••••••-9%
- SPX ••••••••••+2

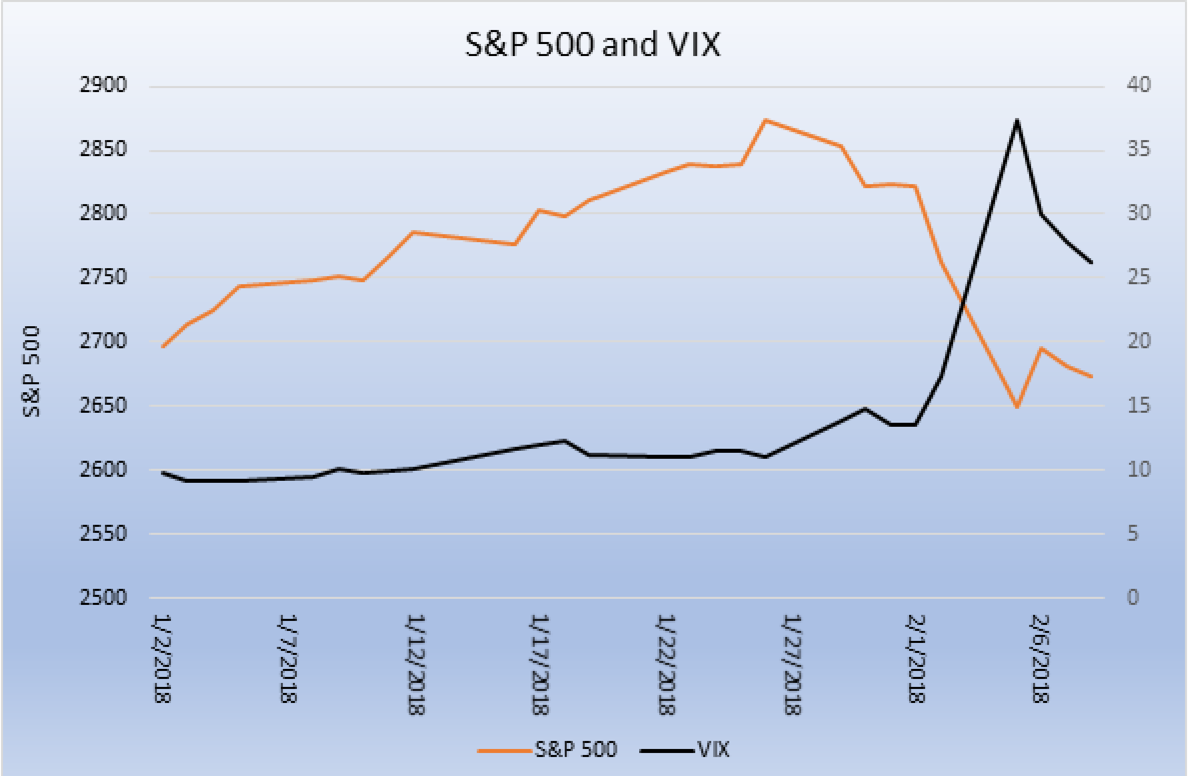
It is understandable that investors believe interest rates are a factor in stock prices on both a theoretical and practical level.• However, the fact that the signs for bonds and stocks are opposite in each episode above suggests that other factors than interest rates are driving stock prices. •The main suspects are global QE and corporate stock buyback programs, which are effectively QE by a different name.• Both of those programs explicitly focus on lifting financial market prices, are still operating in full swing, and are probably succeeding.

Which Is Why The Stock Market Peaked on January 26, 2018

Now, by zeroing in on the period beginning January 26, which was the last all-time high made by the S&P 500, it is possible to make the signs for stocks and bonds be the same.• In fact, even the magnitude is the same! **January 26, 2018-February 22, 2018**

- Bonds -5.6%
- Stocks -5.6

However, using data from a one month period of stock and bond market history, it is possible to arrive an any conclusion.• That?s called data-mining. It is far more plausible to explain the recent drop in the stock market with the extinction event of short-volatility ETFs such as XIV.• As shown below, a peculiar coincidence began in mid-January; the volatility index (VIX) began to rise, even though the S&P 500 Index (S&P) was rising.• Normally, these two indices move in opposite directions.• The obvious conclusion is that someone was accumulating a long position in volatility at a time they normally would be punished for doing so. •Did they know something in advance?



It appears so, because things snapped back to normal at the beginning of February.• VIX quadrupled in just a few trading sessions while stock prices crashed 10% over 6 trading sessions. After seeing these two charts, what seems to have caused stock prices to fall; rising interest rates or leveraged positions in short-volatility ETFs?• The latter seems much more likely a bigger factor than the former.• Put another way, a problem in market-structure (excessively leveraged ETFs) is more likely to have caused stock prices to fall than a change in economic fundamentals (poor economic or earnings reports) or a relatively small change in interest rates. For those who prefer mysteries, stories will probably emerge in coming weeks and months that a classic short-squeeze in volatility was triggered by market participants who were large enough to engineer one.• The incentive to do so?• On the other side of their trades were owners of XIV and other short-volatility ETFs, who permanently lost $3-4 billion in capital due to their penchant for shorting volatility at historically low levels and using vehicles that would be ?stopped out? if VIX rose by 80-100% in a single day.• In a zero-sum world, if someone lost $3-4 billion, someone made $3-4 billion.

Ushering In An Era Of Systematically Higher Volatility.

By now, it should be clear that there is a difference between poorly-constructed volatility ETFs causing a disturbance in the S&P 500?s habitual path higher, and actual economic events (e.g., poor economic and earnings reports) causing a disturbance in the S&P 500?s habitual path higher. •We say ?habitual path higher? because just one month ago, the financial press was filled with stories of tax reform, stock buybacks, and central bank put options as justifications for the inevitable rise in stock prices and disappearance of volatility.• In response, Wall Street strategists were happily raising stock index price targets, bolstered by historical data showing that when January is a positive month, it is almost certain that the remainder of the year will be positive. Just a few weeks later, the financial press is looking for scapegoats for lower stock prices over the past month, the most prominent of which is rising interest rates.• But a much simpler explanation is the popularity of selling volatility at low prices and being forced to buy it at high prices.• That chain of events had been a risk over the past few years as trading volumes in volatility ETFs exploded higher, the same way that a bomb with a fuse is risk until the fuse is lit.• But, for whatever reasons, the fuse lit sometime in late January and the bomb exploded in early February; the risk became a reality.• The mathematical relationships between rising volatility indices and lower stock prices then took over, causing a temporary imbalance of sellers which pushed stock prices down sharply. •The tail wagged the dog. In the aftermath of a 10% decline, it then became time for corporate stock buybacks and global QE programs, which are the largest inflows to stock markets, to do what they usually do; levitate prices for the apparent benefit of shareholders and society at large. •Goldman Sachs said as much when observing that a week in early February was the most active in corporate buyback history. In fact, nobody knows for sure whether the volatility spike of early February will usher in an era of systematically higher stock price volatility.• But here are some observations:

- *Volatility almost certainly had to rise because during 2017, it had reached historic lows and stayed there. Therefore, it isn?t difficult to predict that volatility in 2018 will probably be higher than in 2017.*
- *Observing market volatility is different than identifying its cause with a high confidence level. Did volatility in stock prices rise because of underlying economic problems, the engineered extinction of short-volatility ETFs, rising interest rates, or something else such as political intrigue?*
- *The data leads us to believe that short-volatility ETFs were the most likely suspect, and not rising interest rates as is commonly believed. If so, the rise in stock market volatility is likely be temporary, not permanent.*
- *If volatility reverts to historically low levels, it will reduce the ?income? from shorting volatility. But such a return to the 2017 environment increases the probability of another extinction event for another crop of short-volatility strategies that sell low and could be forced to buy a lot higher.*
- *Short-volatility speculators who survived February 2018 will probably make more ?income? from shorting volatility in 2018 than they did in 2017, simply because the VIX is higher than it was (around 20 instead around 10). Unless volatility spikes again, and possibly for an even longer period, exposing more highly-leveraged bets on short-volatility strategies, and creating even larger losses.*
- *Based on the data of the past nine years, rising interest rates have been associated with higher stock prices, not lower stock prices, with two big assists from corporate buyback programs and global QE, which are intended to drive stock prices higher. Both are still operative, although global QE is predicted to fade to zero in the next few quarters.*

Back in the real world, at some point the business cycle will roll over, leading to a recession, which is more likely to kill the stock market rally than a rise in interest rates from historically low levels.• That?s when you can expect a systematic rise in stock market volatility along with a bear market in stocks.• But a downward turn in the business cycle isn?t evident, at least not yet.

Conclusions

It is certainly possible that the conventional wisdom is correct.• In that view, the rise in interest rates caused a fall in stock prices, as evidenced since January 26, 2018, and will usher in a period of systematically higher volatility. However, a review of the long-term data shows that high stock market valuations have occurred when rates were not at secular lows (1929 and 2000).• So extremely low rates don?t solely explain high stock market valuations, and rates rising from low levels shouldn?t solely explain a decline in stock valuations either.• Even more confounding for those who believe interest rates are the primary driver of stock prices, looking back at the past nine years, stock prices have risen during five periods of sharply-rising long-term interest rates, including the period of the past two months. If global QE and corporate stock buybacks are behind the odd coincidence of higher interest rates and higher stock prices over the past nine years, both are still operative today, so it isn?t clear why rising rates should overwhelm these influences now.• Global QE is projected to fade out sometime in the coming year (we?ll believe it when we see it), but corporate buybacks, as the largest inflow to stocks, will only fade if the business cycle rolls over and cash flows are pinched, just as occurred during the past two recessions. A better explanation for the recent decline in stock prices lies in the implosion of short-volatility strategies.• If that is indeed the explanation, the observed rise in stock market volatility is a temporary market phenomenon, and not one caused by events in the real world. •Nor should it cause events in the real world. Yes, stock market valuations are extremely high, but that observation is not news and has been true for quite some time, so it doesn?t explain why stocks fell sharply after the January 26, 2018 peak. Undoubtedly, some volatility shorts were culled from being able to ply their trade in the future, as investors short-volatility ETFs lost $3-4 billion in market value in a short period of time.• But Apple Inc. has 5.1 billion shares outstanding, so the rout in short-volatility ETFs is smaller than small changes in Apple?s share price, so the risk is to overstate its importance. Was the short-volatility ETF debacle and the associated market decline a warning shot like the Bear Stearns hedge fund blow up in early 2007?• Are larger short-volatility positions lurking but not yet seen?• Was the stock market decline part of a market-topping process that signals a change in trend from up to down?• These are possibilities, but right now we don?t have enough evidence to draw those conclusions, especially in the absence of persistent weakness in the economic environment.• •Upcoming economic and technical data will provide clues to answer these questions, and to whether investment policies should change accordingly.