A Short Discussion of Bear Markets

By Carl Scholtz
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As I sit here today to write in early December of 2017, the S&P 500 has reached yet another record all-time high. Investors are happy and all seems wonderful. It thus seems rather silly to be thinking about a bear market when everything is going so great. But you know what they say, "buy winter coats in the summer." Summer does not last forever. I thought it would be prudent to remind everyone of what a bear market looks like and how it might be mitigated.

First and foremost, a bear market is traditionally defined as a peak to trough move in the stock market of over 20%. Many will correctly point out that this number is somewhat arbitrary. For example, in August of 2011, the market drew down 19% and was hence not technically a bear market. 2011 was quite ugly though. I would also note that a corollary to a bear market is a "correction." Corrections are defined as a peak to trough drop in the stock market of at least 10%. Anything less than 10% barely warrants a term in Investor speak.

What in the world causes a bear market? A recession[1] is the natural response and quite right most of the time, but there can be other factors. For example, in 1987, we technically had a bear market from the one day crash, but there was no recession. Instead, the weakness was driven by technical and mechanical trading factors. Those are the types of bear markets that I don't think can be realistically predicted. Instead, I'd rather focus on the business cycle and how it impacts markets. In analyzing each of the bear markets in the Modern Post-War period (i.e. 1950 and beyond), several interesting data points come to light which I have laid out below. I would note that the data from 1928 yields similar results, but it is quite noisy given the Great Depression spurred nine bear markets and two corrections from 1928-1940. I don't find this period to be applicable to the present.

Since 1950……

- **There have been 9 bear markets;**
- **6 of the 9 bear markets have been associated with a recession;**

[1] A recession is defined as two straight negative quarters of GDP growth

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- **There have been no bear markets since 1966 without a recession (excluding 1987);**
- **Every recession has been linked to either a correction or bear market;**
- **The average decline in a bear market associated with a recession is 39.7%. It is 27.4% when there is no recession;**
- **The average length of a bear market associated with a recession is eighteen months. It is six months when there is no recession.**

There are several lessons to be learned from this rather simple dataset. First of all, bear markets are commonly associated with recessions. For almost all current investment professionals, they have never even experienced a bear market without a recession excepting one unique event in 1987. The second takeaway is that when a recession comes, large drawdowns have always occurred and the bear markets are much deeper and longer than declines with no recession.

The next key question to ask is whether the stock market peaks before, at the same time as, or after a recession. The simple answer is that the stock market is anticipatory. In the Modern Era, the market tops out roughly six months ahead of a recession. In fact, the market has topped out before every recession since 1950 except for topping out one month after it in February of 1980[2]. I have laid out the two most recent examples in the Appendix. The interesting point to note, however, is that recessions are often only revealed well after the fact. As such, the market typically peaks long before the idea of a possible recession even comes to light.

It obviously seems like the best strategy to anticipate a recession and then get defensive. Easier said than done. How do we accurately project a recession ahead of the fact? Unfortunately, economists are notorious for their poor projections of a recession. Why? Frankly, I'm not sure (perhaps, they let subjectivity get in the way). Regardless, I'm not waiting for my favorite economists to give me the thumbs down on the economy. It will probably be too late at that point.

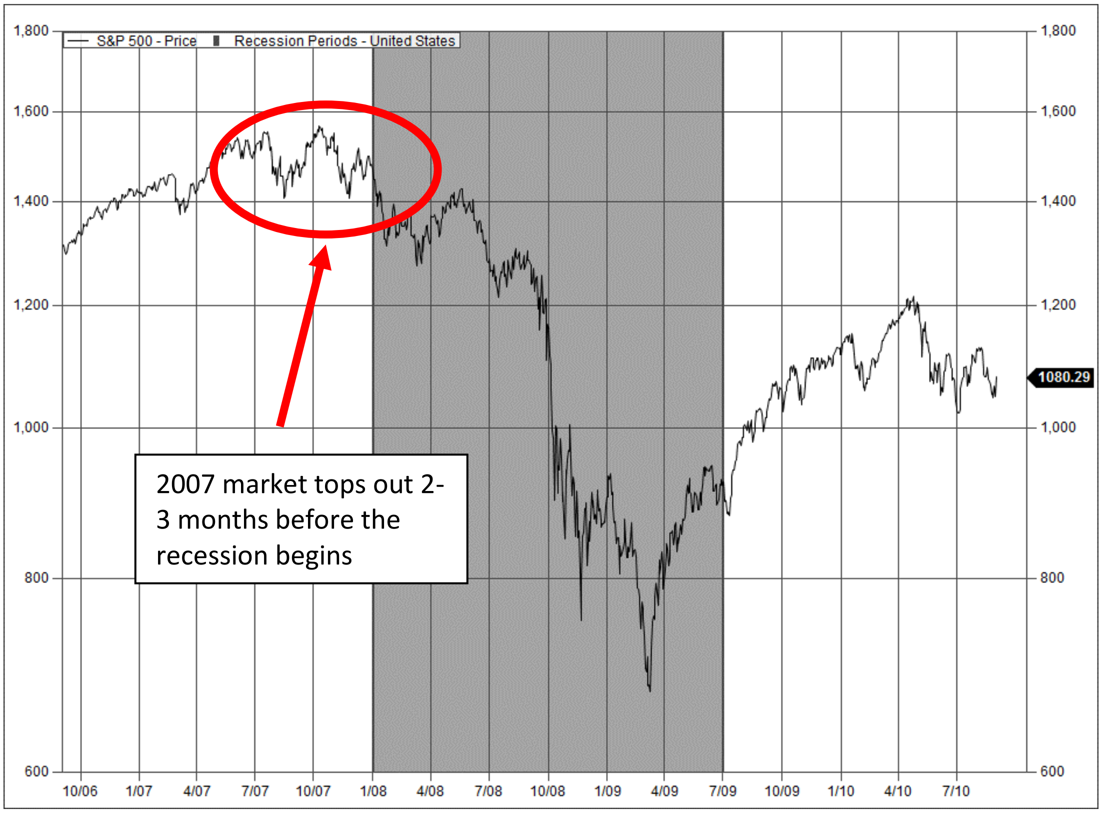
Besides listening to the so-called 'experts', another simplistic approach some take is to look at the length of cycles in determining how much longer the economy and the stock market can continue upward. It is not surprising thus that over the last two years, I have heard pundits claiming that the bull market must end soon because it is one of the longest in history. Yet, as the old adage goes,

[2] A time of two quick recessions, 12-mos apart.

“economic cycles (and stock market cycles as well), don’t die of old age.” While the current bull market is one of the longer ones, it certainly isn’t the longest. Barring the 1987 blip, we basically had a bull market from 1982 to 2000. Further, if the arbitrary bear market threshold was instead 19%, this bull market would have started in late 2011, not March of 2009. It is worth noting that since 1950, we have had a bear market every 7.4 years on average. The standard deviation (i.e. variability) around this data is wild. A similar argument is that the market must go down because it’s too expensive. Outside of that rather debatable fact, stock markets don’t top out due to valuation. Valuation is more of a gauge on how far it has to fall. In response to both of these two misguided views, I would say that it’s more important to focus on the business cycle dynamics than anything else related to time or valuation.

So, how are we going to navigate the next big bear market move? I think the first key is to be on the lookout for a true bear market, not a garden variety 5-15% correction. Simply put, the smaller moves are too difficult to predict. That doesn’t mean one doesn’t attempt to trade around them, but unless you see the next big bear market, you have to be very careful taking money out of the market. This lesson has been repeatedly learned by market participants over the past few years. For us at Scholtz & Company, we have internally worked on a more quantitative approach to discerning a recession and its corresponding market top. We have carefully analyzed over a dozen economic and market variables that might be predictive of a recession ahead of time. The problem is that even with the best indicators, you get a lot of false positives. There are no fool proof indicators. We have found that there is certainly some level of artwork required. For instance, in the summer of 2016, Industrial Production was negative year-over-year for more consecutive months than any of its preceding false positives (by a long shot). Was a recession imminent? No. The other indicators remained positive and the Industrial Production weakness was focused on an area of the country (energy) which was in recession and whose weakness was a big positive for everyone else (lower gasoline prices). In our analysis, we have come up with a group of eight indicators with varying degrees of validity to create an internal ‘Dashboard’ to be monitored, the best of which appear to be the Yield Curve and the Leading Economic Indicators (LEI). As an example, an inverted Yield Curve has occurred ahead of all nine recessions since 1953 (the 1st year of Yield Curve data). It typically leads the recession by 15-months, on average. The Yield Curve has not yet inverted this cycle. When multiple indicators turn negative, it will be time to batten down the hatches and prepare for the storm. For the moment, the sky is quite clear.

<u>October 2007 Market Top Relative to Recession (gray shaded area)</u>



<u>March 2000 Market Top Relative to Recession (gray shaded area)</u>