

The Myth of Black Swan Market Events

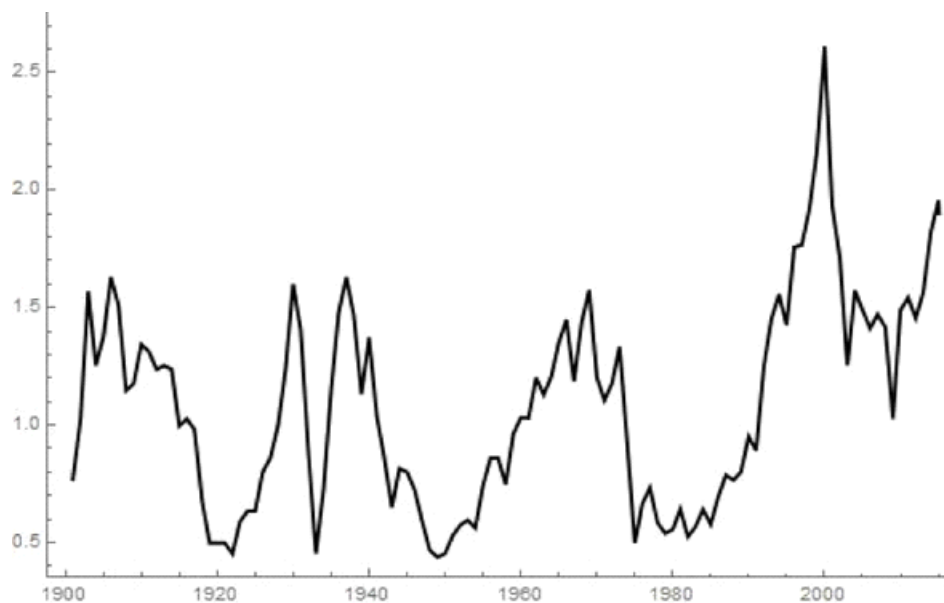
by Mark Spitznagel

The New York Times

February 13, 2015

Mark Spitznagel is the founder and chief investment officer of Universa Investments, and the author of "The Dao of Capital."

As André Gide, the French Nobel laureate in literature, once said, "Everything that needs to be said has already been said. But since no one was listening, everything must be said again." Indeed, no one has been listening to the past hundred years of stock market history in the United States. We have data going back a century that shows the total aggregate valuation of corporate America (think the stock market) in relation to the estimated aggregate replacement value of its stock of capital (think machines, equipment, buildings, chairs, etc.). It is similar in concept to an aggregate price-to-book ratio. This has come to be known as the Tobin's Q ratio; the higher the ratio, the higher the price of corporate valuations relative to their tangible capital, and the more "expensive" the stock market.



You would think that this ratio shouldn't get far out of whack from a long-run average. If average companies became valued high relative to their tangible capital, this would imply that they earn high returns on their existing equipment, and thus further investment in more equipment (growth) should more than "pay for itself" in the form of higher valuations. But each additional dose of investment would lead to smaller and smaller jumps in valuation, bringing those average companies' Q ratios back to normal. On the other hand, if average companies' Q ratios got too low, then it would be natural to assume they would dispose of equipment, or at least stop replacing it, "cutting the fat" and thus pushing their Q ratios back up. These automatic feedback processes, however, don't happen in practice, at least not quickly.

The chart above indicates that, throughout the last century, the Q-ratio (for the aggregate of all companies) has swung wildly. Also note that the ratio is exceedingly high today. The only other time it has been higher was at the peak of the dot-com bubble. The capital stock, though higher, should catch up to the valuations; this isn't happening. Keynesian economists — most notably the ratio's namesake James Tobin as well as modern Keynesians — consider this to be a puzzle. It is only a puzzle if you fail to recognize how interest rates that are set by government decree are not equivalent to interest rates that are set by the free market; people react differently to each. When rates are naturally low, caused by an abundance of patient savers, businesses have the incentive to spend on investment and production; this creates a negative feedback on the ratio. When they are artificially low, and savers are impatiently leveraging, businesses instead have the incentive to spend on stock buybacks and dividends in order to attract the investors who yearn for yields beyond what the artificially distorted market is offering. This drives the ratio, and stock markets, ever higher. Bubbles are not natural and inevitable.

Skeptics will say that less tangible capital is needed in today's service-based, space-age economy. Even so, our ratio is an aggregate number, and an elevated ratio implies, in Lake Wobegon fashion, that your average entrepreneurs are systematically earning above-average returns on their physical capital. Because our economy is more competitive than ever, the transition to a service economy per se can't explain a high aggregate Q ratio. These elevated periods for the Q ratio are clearly unsustainable, because companies cannot borrow and buy back forever. So this highly unnatural mechanism has logical implications not for long-run economic investment and growth (as the Keynesians continue to hope), but instead for short-run stock prices. Complicated statistical analysis is not needed to confirm this.

Each of these high points in the Q ratio — in 1905, 1929, 1936, 1968, 2000 and 2007 — was followed in short order by stock market losses. The peak-to-valley (or the loss from the high price to the low price) subsequent to each high point was 19 percent, 85 percent, 36 percent, 29 percent, 44 percent, and 50 percent, respectively. Furthermore, one can see the surges in bank credit accompanying these periods and tie them to specific policy moves by the authorities: The Treasury stimulated inflation in the early 1900s; the Fed deliberately inflated in the roaring 1920s to take the pressure off the British pound (which had been devalued during World War I); the Roosevelt administration took the reins off inflation by debasing the gold-content of the dollar in 1933; zealous money printing in the 1960s led to the inevitable collapse of the Bretton Woods system (and complete fiat money was born); money printing continued apace with Alan Greenspan in the 1990s and, following the dot-com crash, into the 2000s. Since late 2008, of course, the Bernanke Fed has engaged in unprecedented monetary expansion.

The bear markets we saw following all of these periods were not dreaded "black swan" events at all. They were perfectly predictable, by economic logic alone, the same logic that says governments cannot manipulate market prices without creating distortions that will always, without exception, be counterproductive. In the next stock market crash, we will be told that the fault was some surprising economic or geopolitical shock. Let's remind ourselves now that this will be false, the proximate cause rather than the ultimate cause. The ultimate cause is the same ultimate cause that has been demonstrated to us for over a century: distorted and manipulated markets.

These markets are speaking to us yet again. This time around, we need to listen.