## Two Myths and a Legend - John Hussman www.hussmanfunds.com

The present market euphoria appears to be driven by two myths and a legend. Make no mistake. When investors cannot possibly think of any reason why stocks could decline, and are convinced that universally recognized factors are sufficient to drive prices perpetually higher, euphoria is the proper term.

Myth 1: As long as quantitative easing is underway, stocks will advance indefinitely.
This first myth is embodied in statements like "since 2009, there has been an $85 \%$ correlation between the monetary base and the S\&P 500" - not recognizing that the correlation of any two data series will be nearly perfect if they are both rising diagonally. As I noted last week, since 2009 there has also been $94 \%$ correlation between the price of beer in Iceland and the S\&P 500. Alas, the correlation between the monetary base and the S\&P 500 has been only $9 \%$ since 2000, and ditto for the price of beer in Iceland (though beer prices and the monetary base have been correlated $99 \%$ since then). Correlation is only an interesting statistic if two series show an overlap in their cyclical ups and downs.

If you want to talk about causation, the case for X causing Y is more compelling if the fluctuations in X precede fluctuations in Y. Even in that case, we say that X "causes" Y only if observing X gives us additional information beyond previous movements in Y itself. In the case of quantitative easing, much of what we observe as "causality" actually runs the wrong way. Market declines cause QE in the first place, and the result is a partial recovery of those declines.

As I noted a few weeks ago (see Capitulation Everywhere), the effect of monetary easing has undeniably been very powerful in recent years. However, if you examine the data closely, this powerful effect is almost entirely isolated to a three-step pattern: 1) stocks decline significantly over a 6-month period; 2) monetary easing is initiated, and; 3) stocks recover the loss that they experienced over the preceding 6 -month period.

Regardless of whether one looks historically or even since 2009, a careful examination of the data is very clear: the essential feature of QE has been the recovery of preceding market losses that the market experienced in the months preceding the initiation of QE, with the impact of QE on investor risk preferences invariably wearing off after about 40 weeks. We would not rely on that precise horizon, but it's worth noting that the relevant market low in the most recent instance was on June 1, 2012.


Keep in mind that QE has no transmission mechanism other than inducing discomfort among investors. The entire stock of additional reserves created by QE is still sitting idle in the banking system earning next to nothing. It's just that someone has to hold that zero-interest cash until it is removed from the system, and the entire objective of QE is to make each successive "someone" as uncomfortable as humanly possible, so they will go out and speculate enough to drive the prices of risky assets higher, and their prospective returns toward zero.

The problem with investors' excessive faith in QE is likely to emerge at the point when sporadically emerging economic or financial strains (Europe, global recession, U.S. fiscal policy) weaken the inclination of investors to speculate - pitted against a monetary policy that has no material transmission mechanism other than to encourage speculation. As we observed in 2008, when the Fed was aggressively slashing interest rates well before Bear Stearns got in trouble (much less Lehman), Fed easing is not terribly helpful in a market where risk premiums are depressed and have not spiked materially. The same was true in early 2002, when I noted Wall Street's "cheerleading position" at the time - that the economy was still too weak for the Fed to
raise rates. Again, the Fed's easing did not prevent the market from plunging about 30\% between March and October of that year, despite positive GDP growth and an ISM above 50.

Presently, investors are entirely ruling out the possibility that the stock market could decline significantly in the face of continued monetary easing by the Fed. This belief has far less basis in evidence than investors widely believe. Still, there's no denying the recent market advance. So at least for a while, myth has been more convenient and profitable than fact. I doubt that this will remain the case much longer.

Myth 2: Stocks are reasonably valued
The second myth supporting investor euphoria here is the notion that "stocks are cheap on the basis of forward operating earnings."

It's actually very fascinating how hard this myth dies, given how preposterously wrong the identical assertions turned out to be in 2000 and 2007 - both points where our standard valuation methodology indicated dismal prospective returns for the market (see The Siren's Song of the Unfinished Half-Cycle for a historical review of these estimates).

Part of the problem here is that year-ahead estimates for operating earnings (earnings without the bad stuff) are typically dramatically higher than trailing 12-month net earnings. As a result, forward price/earnings ratios are almost always much lower than "trailing" P/E ratios. But Wall Street conveniently disregards this fact - the "historical norms" that analysts assert for forward $\mathrm{P} / \mathrm{E}$ ratios are really only applicable to the much higher trailing $\mathrm{P} / \mathrm{E}$ ratios. The result is that stocks almost always look cheap relative to those inappropriately inflated "norms." Another technique, of course, is to use norms that are heavily influenced by the late-1990's bubble period - a period where valuations were high enough to produce near-zero total returns for investors for more than a decade. If you use a period of overvaluation to derive your norm, then your norm is overvaluation. How is that not obvious?

One way to reduce this problem somewhat is to compare the forward P/E ratio of each stock to its own average forward P/E over the previous 5-year period. This doesn't solve the entire problem, as we'll see, but it's notable that on a relative basis, forward operating P/E ratios are at about the same point they were at the 2000 and 2007 market peaks. The following chart is from Morgan Stanley (via ZeroHedge):

# Fraction of Stocks Whose Price-toForward Earnings Is Expensive vs. Their History, Five-Year Rolling Windows 2001 Through February 2013 



The larger problem with forward operating P/E ratios is that they purport to value a very longterm asset based on a single year's financial results, which is only appropriate if that single year is adequately representative of long-term cash flows.

This is where myth and reality are strikingly out of line. At present, corporate profits as a share of GDP are roughly $70 \%$ above their historical norm. Despite seemingly endless rationalizations and arguments for the permanence of this situation, the reason profit margins are elevated is actually very straightforward:

## The deficit of one sector must be the surplus of another.

This is not a theory. It's actually an accounting identity. But the effect of that identity is beyond question. Elevated corporate profits can be directly traced to the massive government deficit and depressed household savings that we presently observe.

I should note that this result is the outcome of hundreds of millions of individual transactions, so it's tempting to focus on those transactions as if they are alternate explanations. For example, one might argue that corporate profits are high because people are unemployed, many workers have been outsourced, and government transfer payments are allowing corporations to maintain revenues from consumers despite low wage payments. That's a perfectly reasonable of saying the same thing - but the transaction detail does not change the basic equilibrium that profits are
elevated because government and household savings are dismal. One will not be permanent without the other being permanent.

To see this, notice that corporate profit margins have always moved inversely to the sum of government and household savings.


Notice that elevated profit margins are also strongly mean-reverting over the economic cycle. In general, elevated profit margins are associated with weak profit growth over the following 4-year period. The historical norm for corporate profits is about $6 \%$ of GDP. The present level is about $70 \%$ above that, and can be expected to be followed by a contraction in corporate profits over the coming 4-year period, at a roughly $12 \%$ annual rate. This will be a surprise. It should not be a surprise.


To understand how profoundly imbalanced the present surpluses and deficits in the economy are, the following chart shows the sum of government and household saving, as a percent of GDP. The historical norm for the combination of these is positive, at about $4 \%$. At present, household and government saving sum to a combined deficit of $5 \%$ of GDP.


Here is the punch line. Any normalization in the sum of government and household savings is likely to be associated with a remarkably deep decline in corporate earnings.

Notice that over the past three years, we've seen a very slight improvement in the sum of government and personal savings as a fraction of GDP. That change shows in the following chart as a decline in the blue line (the right scale is inverted). Accordingly, though corporate profits are still extraordinarily elevated, we have also observed a significant decline of earnings momentum in recent quarters. This is not some temporary anomaly. It should be clear from the previous chart that the normalization of government and household savings is just getting started.


As I noted a few weeks ago, it would be one thing if the reason for presently elevated profit margins was even a mystery. But there is no mystery here. Wall Street is grossly overestimating the value of stocks based on profit margins that are $70 \%$ above the historical norm. The expansion of profit margins is the mirror image of the plunge in government and household savings in recent years.

Stocks are not cheap. Forward operating P/E ratios - indeed, any metric that does not adjust for the elevated position of profit margins - are presenting a wildly misleading picture of market valuation. Recognize the reasons for this now, or discover the consequences of this later.

And a Legend
"In my opinion, you have to be wildly optimistic to believe that corporate profits as a percent of GDP can, for any sustained period, hold much above $6 \% . .$. Maybe you'd like to argue a different case. Fair enough. But give me your assumptions. The Tinker Bell approach - clap if you believe - just won't cut it."

- Warren Buffett, "Mr. Buffett on the Stock Market," Fortune Magazine 11/22/99

I started this piece referencing my 2008 comment Why Warren Buffett is Right, and Why Nobody Cares. I'll finish it with the observation that today is not 2008, nor are market valuations anywhere close to being attractive.

It should be clear from my numerous comments over the years that I have great respect for Warren Buffett, but this respect has always been grounded in a fairly good understanding of how he invests, particularly on considerations of valuation, revenue predictability, the importance of return on invested capital, and the necessity of a sustainable competitive advantage to drive the long-term stream of cash flows that a company can be expected to actually deliver to its shareholders over time.

Last week, the euphoric mood of investors got an additional push from Buffett, who commented on CNBC that "We're buying stocks now. But not because we expect them to go up. We're buying them because we think we're getting good value for them."

Frankly, I'm not entirely convinced that one obtains good value by paying a $25 \%$ premium over a company's historical valuation norms for earnings, revenues, dividends and cash flows, unless considerable efficiencies can be unlocked that promise to make the course of future cash flows markedly different from that history. What I do believe is that Buffett's recent investments are more indicative of competitive considerations and faith in management than they are indicative of valuation, particularly in the broad market. As Buffett observed more than a decade ago:
"The key to investing is not assessing how much an industry is going to affect society, or how much it will grow, but rather determining the competitive advantage of any given company and, above all, the durability of that advantage."

So with great respect, I think it’s fair to say that on Buffett's broader considerations, there may very well be reasonable investments available in stocks, provided that one doesn't expect them to go up in the foreseeable future. That said, I am also entirely convinced that from a valuation standpoint - certainly the standpoint that a typical investor would have in deciding whether to allocate capital in pursuit of an adequate expected future return - present market valuations create dismal prospects for investors over horizons of less than 7 years. We presently estimate likely 10 -year nominal total returns on the S\&P 500 only slightly above $3.5 \%$ annually - with the likelihood of strikingly large market fluctuations over the course of the coming decade.

In 1999, Buffett correctly recognized the overvaluation of the market - and the weak basis for investors' assumptions to the contrary - when he noted that "you have to be wildly optimistic to believe that corporate profits as a percent of GDP can, for any sustained period, hold much above $6 \%$." As should be fully evident from both accounting identities and historical data, the fact that corporate profits are now $70 \%$ above their historical norms can be directly attributed to the extraordinary deviation of government and household savings from their own historical norms.

Indeed, the relationship between nominal GDP and corporate profits, over the long term, is large enough to make nominal GDP itself a useful valuation metric. In practice, of course, we consider revenues, earnings, book values, dividends, cash flow, and even forward operating earnings (properly normalized) in our valuation approach. But it should be of more than passing interest that Warren Buffett himself has noted that the ratio of market capitalization to GDP is "probably the best single measure of where valuations stand at any given moment."

The chart below presents the ratio of market capitalization to GDP, using Z1 flow of funds data from the Federal Reserve with the blue line (left scale, log). The red line shows the actual subsequent 10-year annual (nominal) total return of the S\&P 500. The right scale is inverted, so higher levels are more negative. Notice that the elevated ratio of market cap to GDP in 2000 correctly projected the negative total returns that investors would achieve over the following decade, with a great deal of volatility in the interim. By contrast, the lower but still-rich level of market cap to GDP in 2003 nicely projected the most recent 10-year total return of about $8 \%$ annually. The 2009 low was certainly nowhere close to the level of undervaluation associated with the 1949-1952 or 1982 secular lows, but was enough to indicate a likely return of about $10 \%$ annually over the following decade, which has essentially been compressed into the past 4 years.

Presently, the ratio of market capitalization to GDP suggests a likely 10-year total return for the S\&P 500 of about $3 \%$, which is about the same estimate that we obtain from a much broader set of fundamentals. We estimate that the first 5-7 years of this horizon are likely to be associated with zero or negative overall returns for a passive investment in the S\&P 500.


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