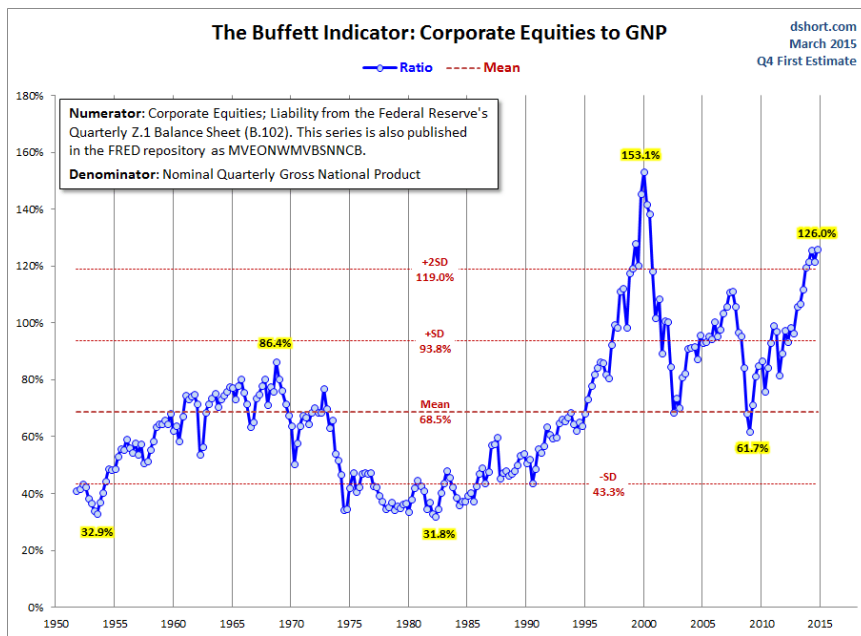


## Is The Stock Market Overvalued?

We're over six years into this bull market, with the S&P 500 having more than tripled since its lows in March 2009. And everyone keeps saying that, as soon as the Fed stops buying in debt and starts raising interest rates, the market is sure to take a massive tumble. Is it true? Is the market over-valued?

Warren Buffett [has said](#) that one easy way to tell whether the stock market is over-valued is to look at a long-term chart comparing the "market value of all publicly traded securities as a percentage of the country's business--that is, as a percentage of GNP."

Fortunately, there is a bright and enterprising fellow named Doug Short who keeps track of this very statistic, saving all of us quite a bit of time in trying to re-create it. He calls it the Buffett Indicator, and here is one of the most recent versions of it, directly from his website:



source: [Advisor Perspectives](#)

As you can see in the chart above, the ratio stood at 126% recently. Excluding the Internet-related stock bubble of late 1999 and early 2000, this is the highest value on record going back to at least 1950.

Holy cow. Does this mean we should sell all of our stocks immediately? Should we head for the hills with a few cases of pork-and-beans, hole up until this all blows over, then come swooping back in after the impending crash, using our buckets of cash to buy up stocks on the cheap?



## Not So Fast

One telling data point that might hold us back from such outright panic is the fact that Mr. Buffett himself doesn't seem too concerned about the current market levels. About a year ago he told CNBC audiences that he didn't believe the U.S. stock market was too frothy at the time. The S&P 500 is up about 12% from where it was when he made that remark, but he doesn't strike us as the type of guy to think things are OK at one level but then think things are wildly over-valued just 12% higher one year later.

So what gives? Is the greatest investor alive schizophrenic? Or is there something more to the story?

## P/S, We Don't Hate You

While the Buffett Indicator gives an interesting snapshot of where we are at any given time in terms of stock market levels, we think there are some significant drawbacks to using it as your one-and-only valuation metric.

The ratio compares the market cap of the entire U.S. stock market to our Gross National Product. So, essentially, it's a price-to-sales ratio.

Now, price-to-sales ratios (sometimes shortened to just P/S) are all fine and good. We're not P/S haters. It can be quite a useful metric when comparing companies within a given sector, though we would never use it to compare two wildly different companies.

For example, Apple's P/S currently stands at around 350% at the time of this writing. That is, Apple's market cap (a little over \$700 billion) is about three-and-a-half times as large as its annual revenue (which is around \$200 billion). It's pretty typical for a high-margin technology company such as Apple to have a P/S that high.

Contrast that to, say, Alcoa, which has a P/S of closer to 55%. That is, Alcoa's market cap of about \$16 billion is a little more than half of its annual revenue of about \$30 billion. Again, a pretty typical ratio for a lower-margin, capital-intensive business.

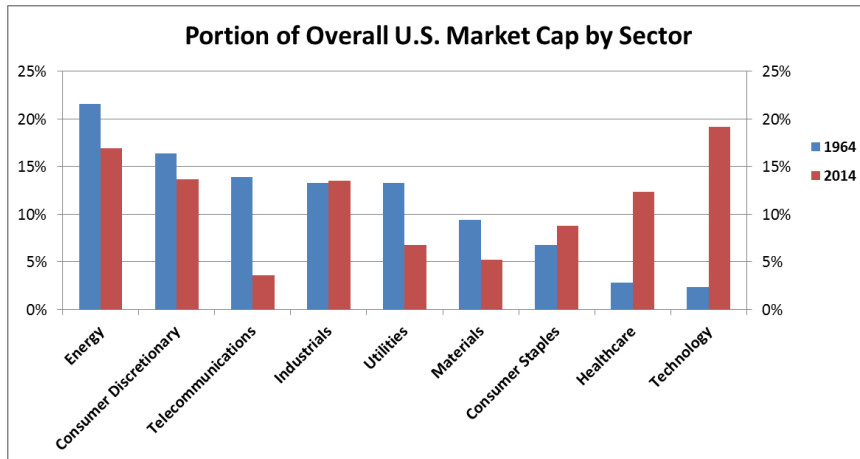
So AAPL is at 350%, and AA is at 55%. But that's just two companies. If you aggregate all the other companies out there in the market, then the total market cap-to-revenue figure is 126%, which is what we saw in the first chart above.

## The Times, They Are A-Changin'

Look again at that first chart. Do you see how far back in time it goes? It starts in about 1950. As you are probably aware, there was no Apple in 1950. There was no Google, either. Or Facebook. In other words, the companies that make up the numerator of the Buffett Indicator today are different than the companies that made up the numerator a few decades ago.



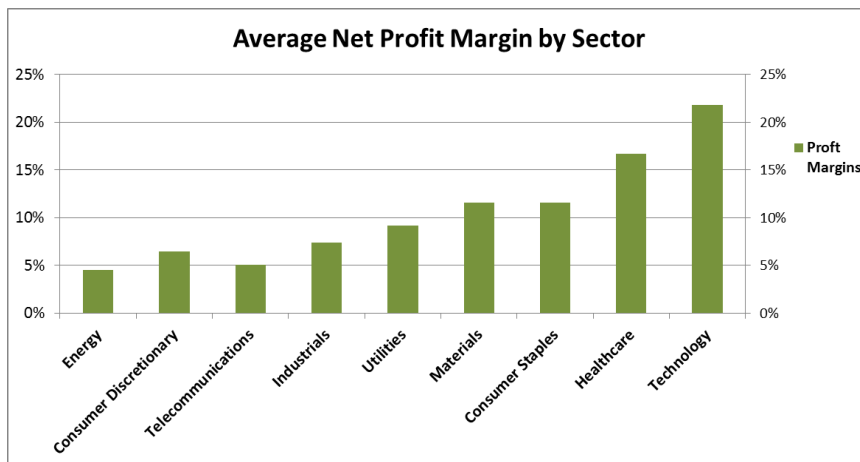
Here is a quick comparison of how the total stock market's capitalization broke down sector by sector both in 2014 and, for comparison's sake, in 1964—fifty years earlier.



source: [O'Shaughnessy Asset Management](#)

While some sectors today—such as Consumer Discretionary or Industrials—represent about the same proportion of the overall market, others have had drastic shifts. For instance, Utilities now comprise just 7% of the overall market cap, versus 13% in 1964. Telecommunications also dropped in a big way, from 14% to just 4%. Meanwhile, the Healthcare and Technology sectors have ballooned from 3% and 2%, respectively, to 12% and 19%.

Those changes wouldn't be that big of a deal, except when you look at them together with the following chart:



source: Morningstar

In words, the two sectors of the economy which have had the largest percentage change in their make-up of the market also happen to be the two highest-earning sectors. And by a long shot, at that. The average profit margin for a Technology company is nearly 22%, and for Healthcare it's nearly 17%. The next-highest sectors, Materials and Consumer Staples, have margins that are more than five percentage points lower than Healthcare.



The margins in that chart are as of today. Even if those margins were the same in 1964 as they are today, the weighted-average profit margin of the overall stock market would have increased from 7.8% in 1964 to 11.3% in 2014, just from the mix shift alone. That may not seem like such a big jump at first, but it represents a 45% increase in the profitability of American enterprise.

### **But Wait, There's More**

That 45% increase in American profitability, though, was predicated on an important assumption. We said that analysis would hold "even if those margins were the same in 1964 as they are today." But that's the thing. Profit margins in 1964 were not the same as they were in 2014. They were significantly lower across most industries, due to the increasing efficiency of American business.

On top of that, the corporate tax rate has continued its march lower and lower over the last few decades. The U.S. effective tax rate for corporations currently stands a little above 25%, according to the Congressional Research Service. That is down from about 30% ten or fifteen years ago, 35% about twenty years ago, and 40% about thirty years ago. For every dollar that Uncle Sam does not take from a company's profit, the shareholders' bottom line increases and makes the company that much more valuable in the public market.

One final point that applies specifically to the last five or ten years: interest rates are at a multi-decade low. In addition to general and administrative expenses, depreciation, amortization, and so on, one of the many costs a company must bear is interest expense. The lower the prevailing interest rates, the lower that interest expense, and the more income that flows through to the bottom line.

Put all of that together and it's easy to see—even though we haven't taken the time to precisely quantify it—that aggregate profit margins today are much higher than they were in the past. And since it's these bottom line profits which matter most when valuing a company, we should expect a higher price-to-sales ratio for a high-profit company (say, Apple) as compared to a low-profit company (say, Alcoa). All of which means that we should expect the P/S ratio for the nation today to be high when compared with history.

### **Feel Free To Ignore All of This—We Certainly Will**

But, of course, we have no horse in this race. We will neither profit nor suffer, based solely on the valuation level of the market as a whole. We are individual stock pickers, and we have no interest in making any sorts of calls of market tops or market bottoms. We have seen others chase after that fool's errand so many times in the past, we have seen the egg that inevitably ends up on their face, and—frankly—we're just fine with our complexions the way they are.

What's more, all of this is merely an academic exercise. When you search the investment landscape for individual securities to buy, like we do, it's sort of irrelevant whether the market is



at an all-time high, an all-time low, or somewhere in between. The only question that matters is, "Is the stock that I'm looking at right now cheap enough for me to buy it?"

Fifteen years ago, when the stock market bubble was at its most frenzied levels, value investing practitioners who are long-enough in the tooth to remember back that far can recall finding dozens of opportunities to put money to work. While Pets.com or Amazon.com at the time may have been selling at valuations that can only be described as ridiculous, there were plenty of other fine companies selling at bargain prices. Some of the best investment managers out there had their finest returns during the market meltdown of 2000 and 2001.

All we can do today is the same as what we can do every other day: keep looking for bargains, and—when we find them—buy them.



Felipe Garcia, CFA  
Chief Investment Officer  
INKWELL CAPITAL LLC



Aaron Byrd, CFA  
President  
INKWELL CAPITAL LLC

