10 November 2008

How Low, How Bad, How Long?

By John P. Hussman

With the S&P 500 down nearly 40% from last year's highs, and now trading modestly above 10 times last year's peak earnings level, I continue to view stocks as somewhat undervalued, in that long-term investors can expect the S&P 500 to deliver total returns in the area of 10% annually over the coming decade. This is the largest expected return premium, relative to long-term Treasury yields, since the early 1980's.

These changes have significantly improved my views about market valuations and long-term return prospects, but I want to discourage any impression that stocks have “hit bottom” or that a new “bull market” is at hand. That sort of thinking isn't really helpful to investors, who should always be grounded in observable evidence (rather than trying to infer things like bottoms and turning points, which can only be identified in hindsight). Frankly, the idea of identifying those things in real time is wishful thinking. Investors *should not* rule out a continued bear market, or deeper lows, perhaps early next year (depending on the evolution of the economic evidence). Still, *even* in the context of a continued bear market, we may well observe a huge 25-35% trading range as evidence develops, pushing and pulling on the perceptions and expectations of investors. Better to be comfortable with uncertainty and thoughtfully adapt to observable evidence as it develops, rather than planting a flag in the ground and being trampled from both sides.

Staying with the present moment – with what can be observed – doesn't mean one ignores the past or fails to consider the future. Observable valuations and market action were enough to inform investors that the market outlook was precarious at last year's peak (see 7/30/07 Market Internals Go Negative, and 10/15/07 Warning – Examine All Risk Exposures). Observable precursors of economic risk were enough to tell investors that the U.S. was headed for a recession even in November of last year (see Nov 12, 2007: Expecting A Recession).

Presently, observable evidence suggests that stocks are no longer strenuously overvalued, as they have been for over a decade (with the consequence that stocks have lagged Treasury bills over that period). Observable evidence also suggests that the washout last month was spectacular enough (and the breadth reversal substantial enough) to *allow for* – not ensure – a sustained advance. This could occur even within the context of an ongoing bear market, if only to allow the natural ebb and flow of data to confirm or refute the fears already impounded into stock prices. On average, similar conditions have provided a basis for strong, if impermanent, recoveries – most likely beyond the extent that we observed through last Tuesday. The selloff we saw late last week looked a lot like a standard “re-test.” A large expansion in trading volume during the next advance, whenever it comes, would add to the sustainability of a rebound.

We continue to have the majority of our portfolio holdings – currently about 80% - hedged with index put options. This provides increasing participation in advances, particularly as the market moves significantly away from our strike prices, and provides increasing defense in declines, but only when the market moves close to or below our strike prices.

Presently, our hedges are a few percent out-of-the money, which means we will tend to “drag” a little bit on initial advances, participating more if the market moves significantly higher, and we will tend to experience a gradually lessening impact from declines in the event that the market moves significantly lower. Those tendencies are approximate, of course, since the relative performance of our stock holdings, and moderate variation in the extent of our hedging will also play a role.

Overall, valuations have improved enough that long-term investors should be buyers, not sellers, on any substantial weakness from here. But there is no strong reason to expect that stocks could not become even cheaper. Again, it's likely, but not assured, that some of the recent price compression will be relieved by a substantial advance of several weeks or a few months, even if the market is ultimately destined lower. We do want to have some exposure to market fluctuations here, but given an ongoing recession with little likelihood of ending shortly, we're only likely to move to an unhedged position if we observe evidence of a robust improvement in the *quality* of market action (which is driven more by the *uniformity* of market action across sectors and security types than by the *extent* or *duration* of an advance).

Except on significant, discrete evidence of a shift in the quality of market action (which is the only time that we are inclined to increase our exposure on strength), the discipline is to *gradually* increase market exposure on substantial market weakness. From the standpoint of the Strategic Growth Fund Prospectus, we are essentially in the yellow box – Quadrant 2 – where valuations are favorable and market action is still generally unfavorable. Since the return/risk profile is characterized by average expected returns (in the 10-12% annual range) but also high volatility, it is important to maintain some defense while at the same time increasing exposure on significant declines.

What if the recession isn't over in 6 months?

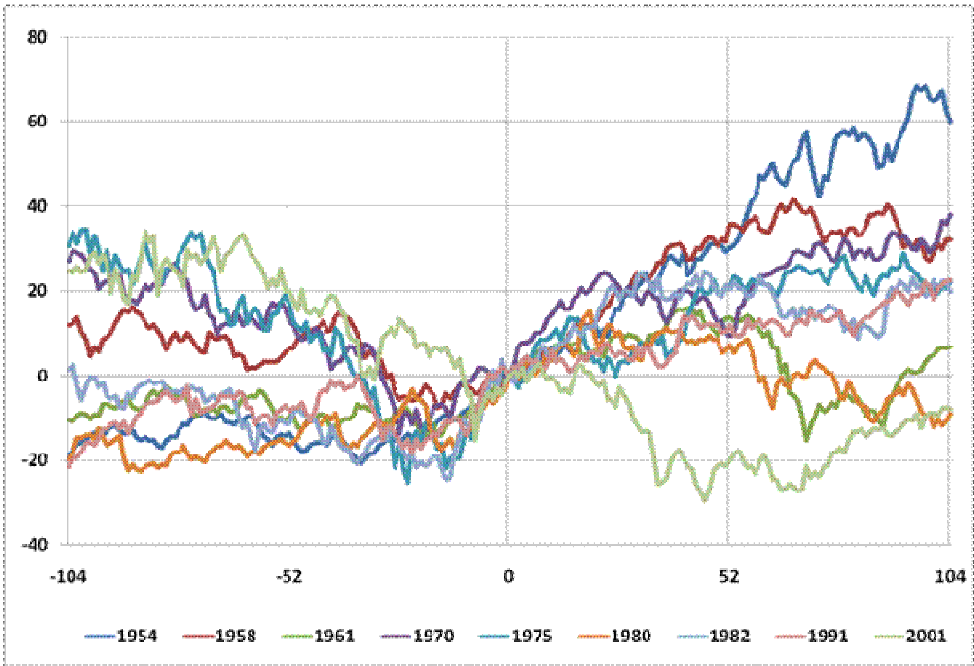
All of us know that the stock market bottoms 6 months before the end of a recession.

The problem is that this “fact” isn't really true. The actual facts are that substantial losses typically occur between the market's peak and the point that a recession is universally recognized, and major gains reliably begin only about three months prior to the end of a recession, and continue into the recovery.

Aside from that, *between* the point that a recession is well-recognized, and a short period before the recession ends, the market's direction is extremely variable and largely depends on how the economic news evolves, as well as the extent to which stock prices become oversold or overbought in the interim. There can be strong and prolonged advances during this period, as well as wicked declines from points where the market becomes overbought.

To offer some perspective on the variability of returns prior to the end of a recession, Bill Hester was kind enough to grind out a few charts, showing the behavior of the market in the span before and after the end of every post-war recession. The charts depict the total return of the S&P 500 Index, and are scaled so that all of them pass through zero on the date that each recession ended.

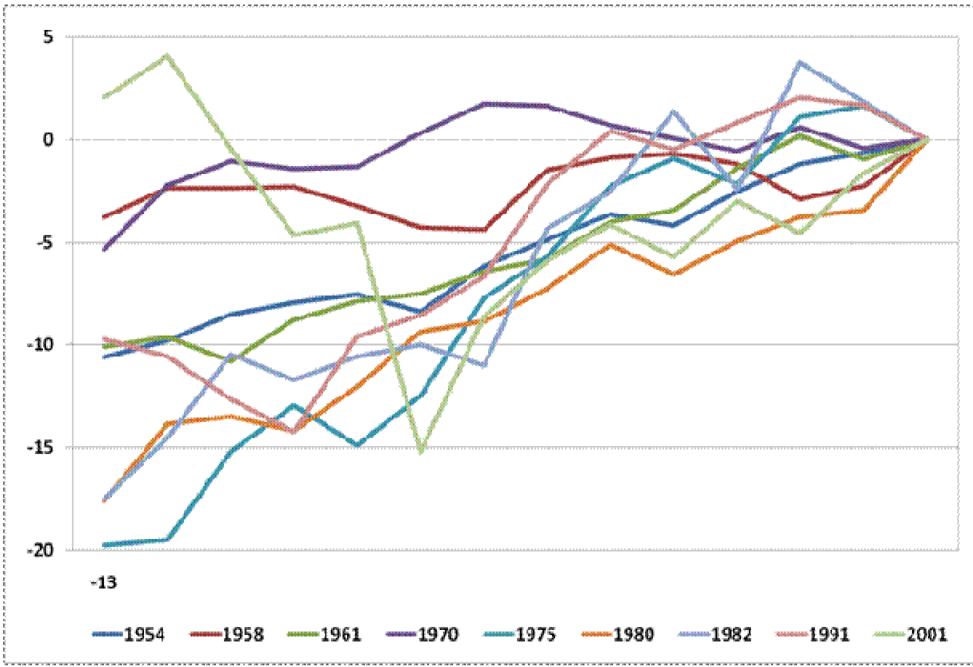
The chart below shows the performance of the S&P 500 *two years before and after* the end of each recession. Notice first that two years (104 weeks), one year (52 weeks) and even 6 months before these recessions ended, about half of the lines were below zero and about half were above zero, meaning that it has been a coin toss whether stocks would be higher or lower by the time that the recession was complete. In more than half of the post-war recessions, stocks were nearly the same place 6-8 months before the recession ended as they were *two years* before it ended. There is simply an enormous amount of variation. It isn't particularly useful to approach the market with nicely constructed scenarios about where or when the bottom will occur, especially when those scenarios (e.g. “6 months before the recession ends”) misinterpret the data.



Rather than believing that the market continuously declines during a recession and hits bottom 6 months before it ends (which matches 1970 and 1975, but not much else), a better generalization is that *regardless* of how stocks perform during a recession, the market is nearly always advancing strongly by the time that the recession has three months to go.

The distinction here is that an ongoing recession should not be evidence that keeps an investor completely out of the market (at least once that recession is well recognized). Instead, the data should remind us that even if the market experiences a great deal of volatility and sideways movement as a recession progresses, stock prices can be expected to launch into substantial gains *before* the recession is over.

This echoes Warren Buffett's remark a few weeks ago – "if you wait for the robins, the spring will be over." Buffett isn't buying because he's confident that the recession has less than 6 months to go. He's buying because he finds stocks worth buying. Stocks can have very mixed performance over the course of a recession, but they almost always advance strongly before it ends.



Information in a recession evolves very slowly. A lot of bad news, as well as very negative expectations, are already built into stock prices here. While I don't think that gives us a "bottom," I do think it gives us enough room for information to ebb and flow about whether the downturn will be worse than people think, or maybe not as bad as they expect. As that information flows day-by-day, week-by-week, month-by-month, the market could easily have a 25-35% range with a lot of sideways action, even in the context of what might turn out to be a prolonged recession.

Investors often have little success in actually buying low and selling high, because to buy low is to buy into fear and uncertainty, and to sell high is to sell into enthusiasm and confidence. Investors pay an enormous price for constant comfort. For our part, we'll continue to be aware of the risks, but also of the potential returns, and we'll take those risks that we expect to be well compensated – not in every instance, but on average.

Can't stocks get even cheaper?

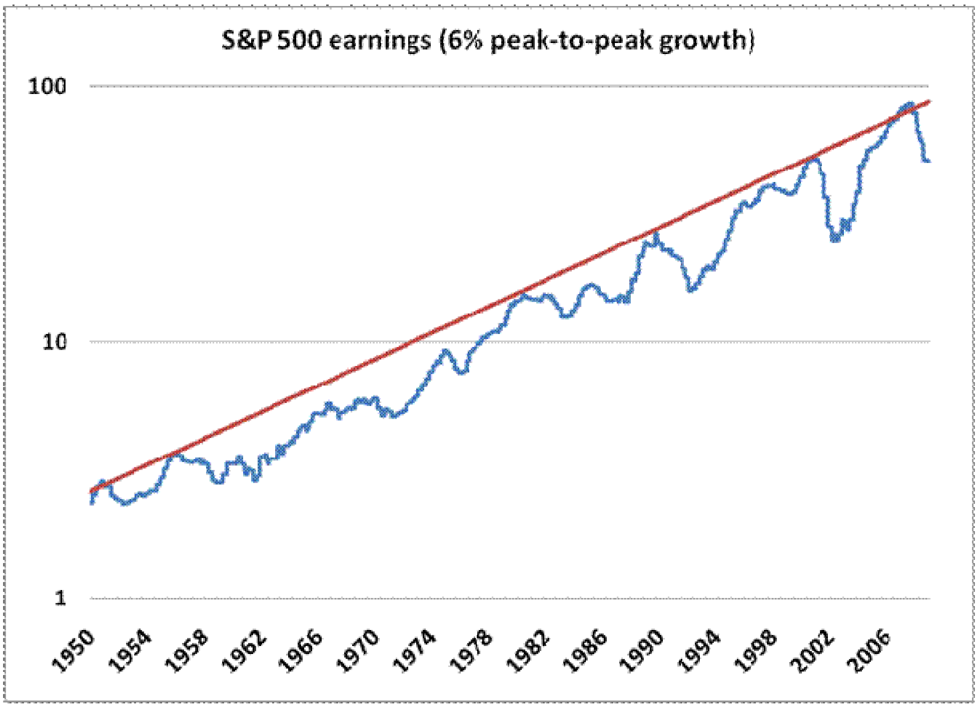
On the issue of valuations, I want to reiterate that while I believe that stocks are (finally) priced to deliver acceptable and even modestly attractive long-term returns, valuations are still not *deeply* depressed on a historical basis. Valuations might indeed move substantially lower over the course of an extended recession and "bear market." I do believe that significant new lows are unlikely in this particular leg. Obviously, we are not *relying* on that, but from a historical perspective, the levels of volatility, bearish sentiment, and oversold extremes we observed at the October lows have typically been followed by strong, if ultimately impermanent, retracements higher.

The most important thing for investors to understand about market valuations is that if they do move to lower levels, stocks will also be priced to deliver higher long-term returns at that point. So the mindset we want as investors is one that will tend to *increase* our exposure on significant weakness, not abandon it. The only way to do that is to maintain some amount of hedging until valuation or market action improves more substantially. This is why we continue to have a “net” – using index put options – underneath the majority of our portfolio holdings.

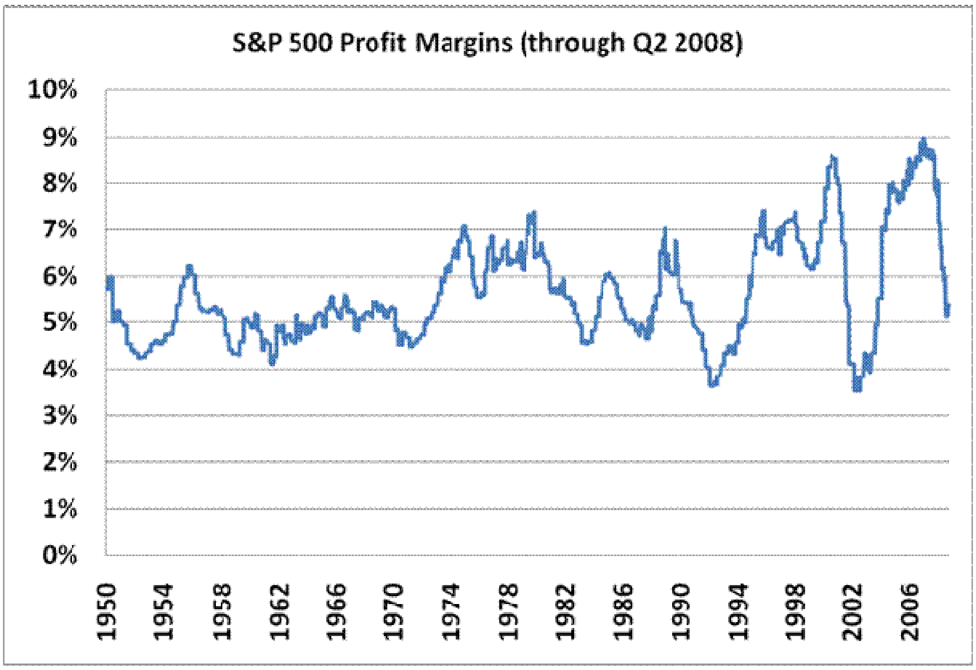
It will help to be careful about the analysis of valuations, because there are a lot of bad arguments being thrown around. Among the most misleading are calculations about potential risk and fair value based on *current* earnings, without normalizing them in some way. Some analysts are talking about how low earnings might go in a deep recession, and what P/E multiple might be applied to them at the trough, based on P/E multiples at other bear troughs. That sort of analysis strikes me as coarse and unhelpful, since the extent of the earnings contraction varies dramatically from one bear market to the next. There's no such object as a “P/E on trough earnings” – at least nothing well-behaved. Stock valuations should only be based on measures that are somehow representative of the *long-term stream of cash flows* that can be expected from that point onward. Trough earnings are not helpful in that regard.

Much better to base valuations and potential risk calculations on normalized earnings – some smooth and well-behaved measure like peak-earnings, earnings at a fixed profit margin (essentially proportional to sales), mid-channel earnings, etc.

Let's take a look. The chart below shows the path of S&P 500 earnings since 1950. Notice that while earnings are extremely variable (and in fact, are more variable than stock prices themselves), the growth rate from peak-to-peak across economic cycles has been remarkably stable at about 6% annually.



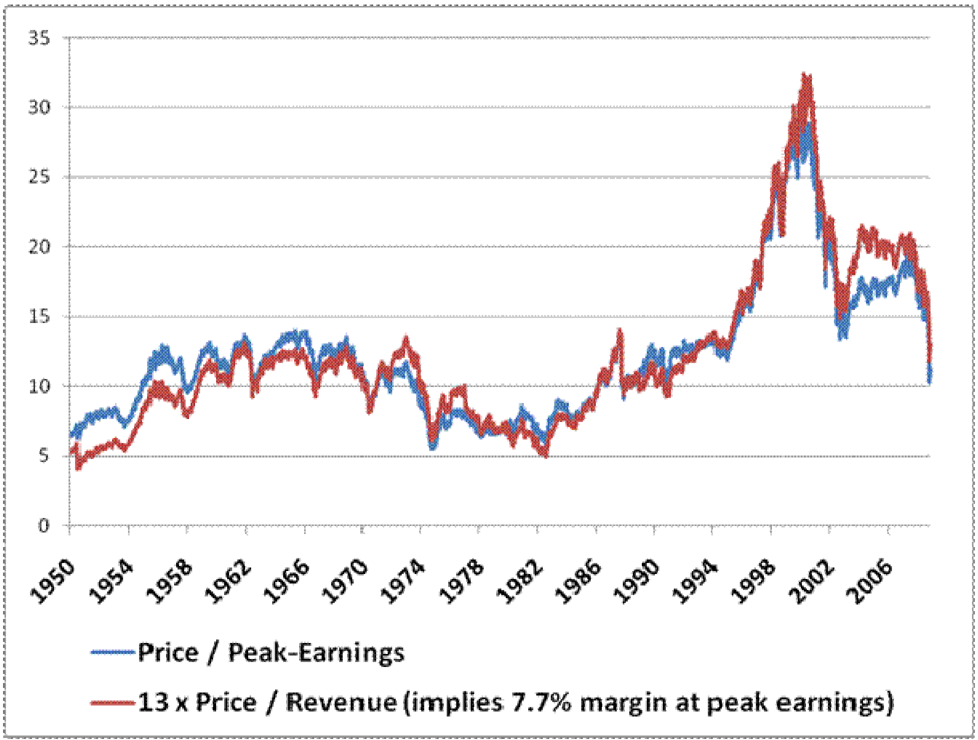
Not surprisingly, nearly all of the cyclical fluctuation in earnings has been driven by fluctuations in profit margins (revenues have dramatically less volatility). Profit margins tend to mean-revert over time – a fact that some analysts dismissed in recent years, but is suddenly no longer a subject of debate.



So there is enormous variability in earnings over the business cycle, and a lot of that variability is “noise.” We would never want to use a straight P/E multiple to value the market, because historically there has been more variability in the “E” than in the “P” – and that's despite the fact that earnings have actually been very well-behaved on a peak-to-peak basis. Likewise, we observe an enormous amount of variability in profit margins. Even with long-term improvements in productivity, margins still fluctuate and revert to the mean. That mean might have risen slightly over the decades, so that peak earnings used to occur at 6-7% margins, and a conservative estimate might now be closer to 8%, but it's clear that most of the variation in profit margins is cyclical “noise.”

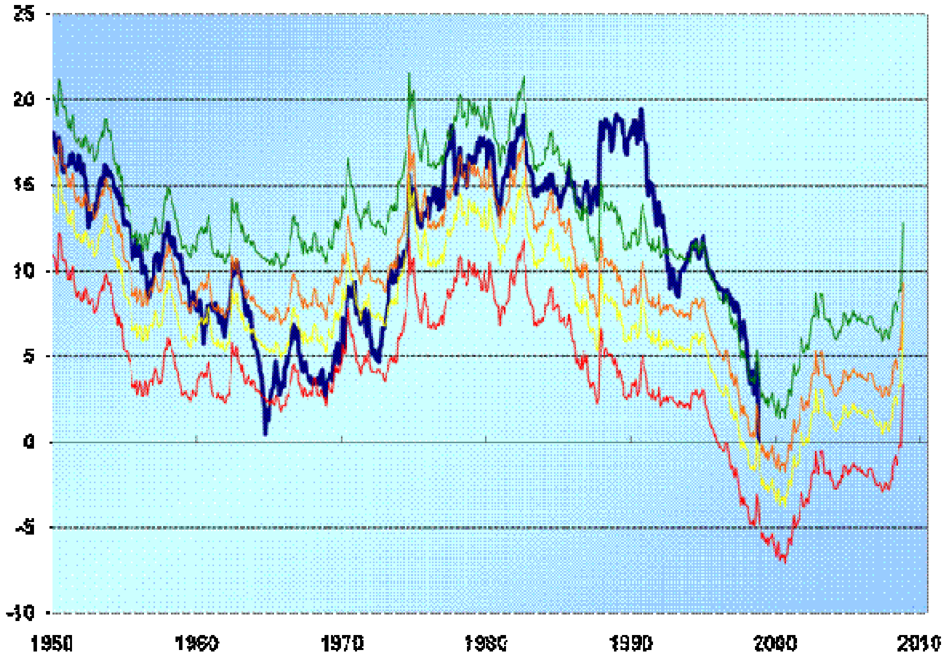
To adjust for that noise, we have to form our valuation multiples based on some *smooth fundamental* rather than a noisy, cyclical, mean-reverting one. This is essential, because stocks aren't a claim on next year's earnings – they are a claim on a very long-term stream of cash flows, and short-term variations in earnings have very little effect on the value of that long-term stream.

The chart below shows the valuation of the S&P 500 based on two reasonably smooth fundamentals. One is just the highest level of earnings achieved to-date (which grows in a stairstep fashion over time). The other is just 13 times the price/revenue multiple of the S&P 500. The scaling is done so that it can be compared with the P/E multiple, and essentially implies a fixed profit margin of 7.7% at peak earnings (I could get fancy and vary the assumed profit margin at each point in time based on historical data, but the only effect would be to make stocks appear a bit more overvalued in the 1960's and early 1970's, and a bit more undervalued today.) Both multiples are now modestly below their historical average and median levels.



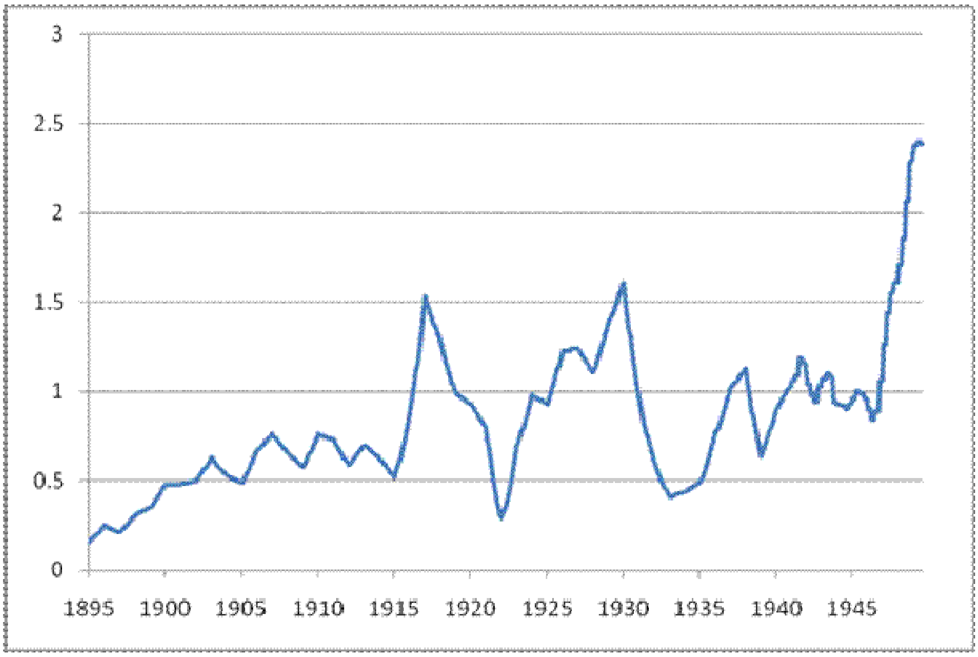
The extent of the correction in valuations since 2000 is striking. Eight years later, despite a general expansion in earnings and the U.S. economy, an investment in the S&P 500 has lost a quarter of its value, including dividends.

Our 10-year total return projections for the S&P 500 Index (standard methodology) are presented below. The heavy line tracks actual 10-year total returns since 1950 (that line ends a decade ago for obvious reasons). The green, orange, yellow, and red lines represent the projected total returns for the S&P 500 assuming terminal valuation multiples of 20, 14 (average), 11 (median) and 7 times normalized earnings.



In a worst-case scenario, if stocks were priced at 7 times peak earnings a decade from now, total returns for the S&P 500 would come to just 4-5% over that decade. Of course, stocks would then be at valuations similar to 1982, so total returns over the following decade could be expected to exceed 12% in the worst case scenario, with probable returns closer to 20% annually over the following 10 years (all of which implies that stocks are priced to deliver total returns of about 10% annually over the next 20 years almost regardless of the path they take).

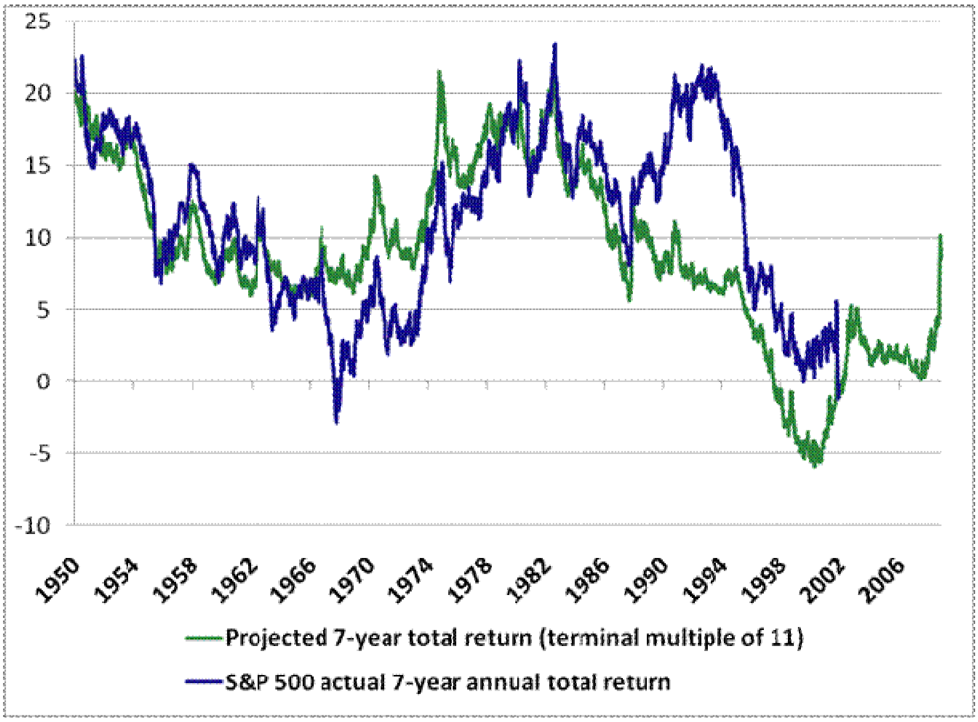
It is important to note that even in the Great Depression, it took until 1931 for the price/peak-earnings multiple on the S&P 500 to drop below 11. That did not occur after the 1929 plunge. Moreover, the peak earnings level in 1929 reflected a spike that (aside from a brief period in 1917) was unusually high in the context of *normal* earnings. I can't possibly overemphasize how important it is to gauge valuations on normalized earnings, not spike peaks or spike troughs. On normalized earnings, stocks were still overvalued at the 1929 trough. It took until 1931 for stocks to look cheap even on the basis of peak earnings from 1929. To see what was going on, here is a picture of S&P 500 earnings (Cowles Commission data prior to 1921) from 1895 through 1950.



Note that the earnings plunge that accompanied the Great Depression was transient, so in the context of *long-term* discounted cash flows, it had little effect on the *long term* value of stocks. The same is likely to be true today. **The strongest determinant of market *fluctuations* is change in the *valuation multiples* that investors apply to normalized earnings, not major shifts in the *long-term* earnings power of U.S. corporations** .

Investors should recognize that the lower stock valuations become, the higher the probable subsequent long-term returns will be, even if valuations *remain* low from that point onward. The only reason investors should fear a decline to low valuations is if they would be compelled to abandon stocks there.

Though the relationship between valuation and subsequent returns is slightly more reliable at 10-year intervals than say, 7-year intervals, that shorter horizon is also of interest. Presently, it is quite reasonable to expect total returns for the S&P 500 in the area of about 10% annually even on a 7-year horizon. That does nothing to assure that valuations will not improve further, driving probable long-term returns even higher, but **long-term investors can finally invest with some expectation that time is once again on their side.**



Stocks are no longer overvalued. That does not mean that they have “hit bottom” or that substantial risks are no longer present, but the prospect for long-term returns is already satisfactory. **The improvement in valuations over the past year should change the central focus of investors**. A decade ago, and even a year ago, the primary concern on our minds was to avoid profound, unacceptable losses that had little chance of being recovered naturally. The risk was not just that stocks might drop substantially. The risk was that at the end of the decline, stocks would still be overvalued, so investors would still have no confidence that the losses would be recovered.

Presently, we are in a different situation. Yes, stocks might decline further. But if they do so, they will also be more undervalued, and likely to achieve long-term returns (say over 7-10 years) that will make investors not just whole, but reasonably rewarded. There's no question we would prefer to establish larger commitments to market risk when much higher long-term returns might be available, but that's why we are keeping moderate hedges in place. I don't expect, but can certainly *hope* that valuations will eventually contract to 9, 8 or (less probably) 7 times normalized earnings. Those levels would correspond to roughly 770, 680 and 600 on the S&P 500. We may have a continued recession ahead, but I can't emphasize enough that stocks are a claim on a very long-term stream of cash flows, and even zeroing-out two or three years of those cash flows would have very little effect on their fundamental value.