The bleak outlook for the U.S. stock market

DeForest McDuff

March 1, 2008

Click here for the Market Comments main page

Preview

In this issue, I examine the long-term performance of the U.S. stock market since 1870. Using data made publicly available by Robert Shiller, Yale economist and author of *Irrational Exuberance*, I identify the major historical bull and bear markets and discuss the outcomes of having been invested in each.

Except for the peak of the Internet Bubble, today's stock market has the worst overall outlook in the last 60 years. The S&P 500 stock market index has the unfortunate combination of being at earnings and price-to-earnings ratio peaks at the same time.

In the next 5-10 years, investors can expect single digit returns at best and substantial long-term losses at worst. With inflation currently at 4.3% per year, even the most optimistic returns do not seem to be worth the risks to the downside. Even if nominal returns are positive, I expect returns adjusted for inflation to be zero or negative for some time.

All analyses below are my own, but I am heavily influenced by the work of Robert Shiller, John Hussman, and Eric Janszen, as well as a similar piece that I wrote in 2006.

A brief history of the U.S. stock market

From 1885 to 1980, the S&P 500 index returned 8.7% annually including reinvested dividends (6.2% after adjusting for inflation). But what most investors don't realize is that the majority of stock market returns occur over segmented 10-20 year time intervals. I calculate long-term returns from 1885 to 1980 because both years correspond to long-term market bottoms. Including the last few decades distort long-term returns because we have not yet completed a full stock market cycle.

Adjusting for inflation, it is not uncommon for the stock market to spend decades with near-zero or negative returns in major bear markets. The following table identifies the major bull and bear markets in the last 140 years and displays the outcomes of having been invested in each:

Market	Start	End	Years	10y P/E	S&P	Dividend	Inflation	Total Return	Real Return
Bull	Jan-1885	Jun-1901	16.5	11.2	$ 4	7.1%	-0.6%	9.0%	**9.5%**
Bear	Jun-1901	Aug-1921	20.2	26.5	$ 9	3.6%	4.3%	4.1%	**-0.3%**
Bull	Aug-1921	Sep-1929	8.1	7.3	$ 6	7.4%	-0.3%	28.0%	**28.3%**
Bear	Sep-1929	Apr-1942	12.6	32.1	$ 31	3.0%	-0.6%	-5.1%	**-4.5%**
Bull	Apr-1942	Jan-1966	23.8	9.8	$ 8	8.7%	2.9%	16.1%	**13.2%**
Bear	Jan-1966	Apr-1980	14.3	25.8	$ 93	2.9%	6.8%	4.6%	**-2.2%**
Bull	Apr-1980	Dec-1999	19.7	11.7	$ 103	5.7%	3.8%	18.1%	**14.3%**
Bear	Dec-1999	??	8.3	48.9	$1,429	1.2%	2.6%	2.1%	**-0.6%**

The highlighted bull market rows show when investors would do well being in the market. The alternating white rows show the bear markets which have always produced returns less than inflation. **Right now, we are in a long-term bear market with no reason to think we are near the end.**

I identify the major bull and bear markets by the 10-year lagged price to earnings ratio, that is, today's stock market price divided by the average earnings in the last 10 years. Major market bottoms occur at P/E ratios of 7-12, whereas major market tops occur at P/E ratios well above 20. **Today's stock market has a 10-**

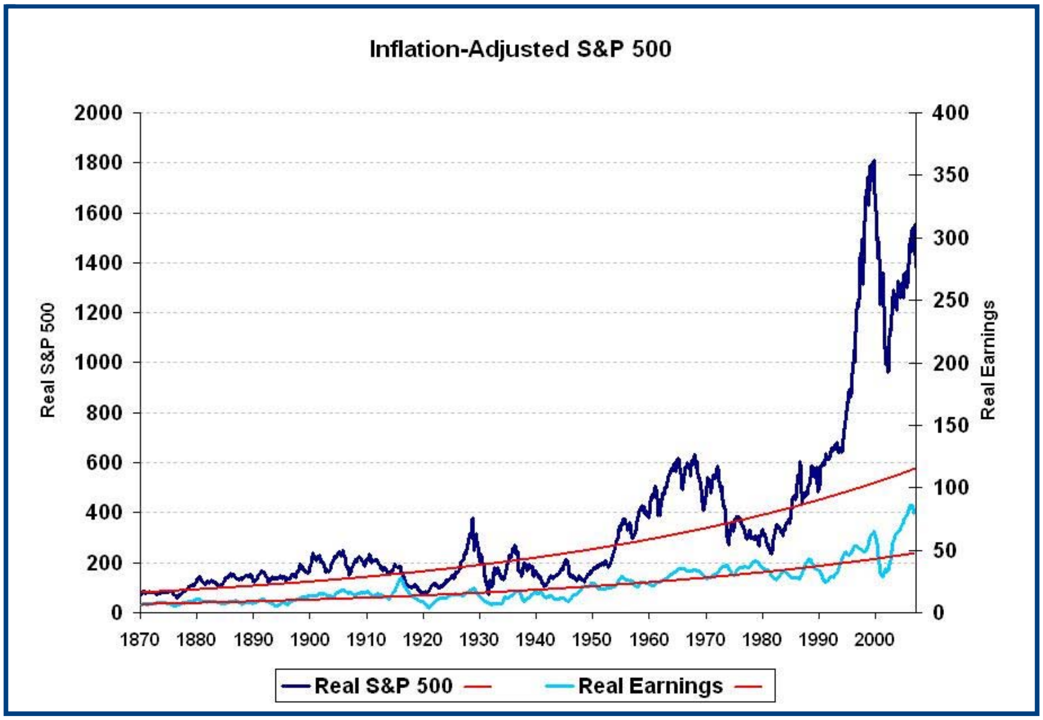
year lagged P/E ratio of 27.5, which is higher than any other time in U.S. history excluding the 1929 and 1999 peaks.

Bear markets typically fall into one of two categories. In the first type, the stock market actually declines in dollar value. This has occurred only once in U.S. history, from 1929-1942 during the Great Depression. The second type of bear market is less salient but no less devastating for investors. These markets return 0-5% per year, but produce a negative real return after adjusting for inflation. The classic example is the 1970s, where the stock market returned 4.6% over 14 years while inflation averaged 6.8% over the same time period.

Notice also the high dividends (5-9%) at stock market lows and low dividends (1-4%) at stock market highs. Today's stock market dividend is under 2%, near the lowest in history.

So far, today's bear market resembles the 1970s, and I fully expect it to last another 5-10 years with little or no real return.

The following chart illustrates just how overvalued today's stock market is relative to history. Some argue that the recent price increase is the beginning of a new bull market, but I see it as nothing more than a bull market rally in an otherwise broader bear market:



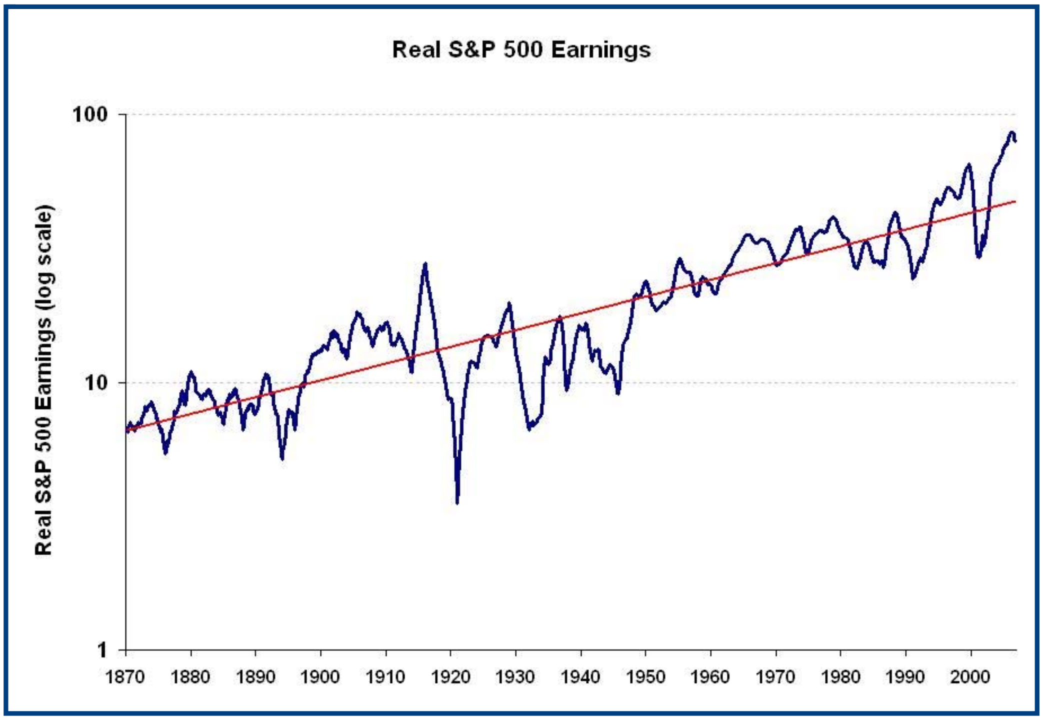
Click on the image above for a sharper version

Adjusted for inflation, the long-term price and earnings growth of the U.S. stock market is around 1.5% (indicated by the red lines), with dividends providing the majority of total returns. Notice the recent divergence of the U.S. stock market relative to corporate earnings and the 100-year price trend. **In my view, prices are too high and dividends are too low to produce any worthwhile long-run stock market return.**

Long-term earnings growth

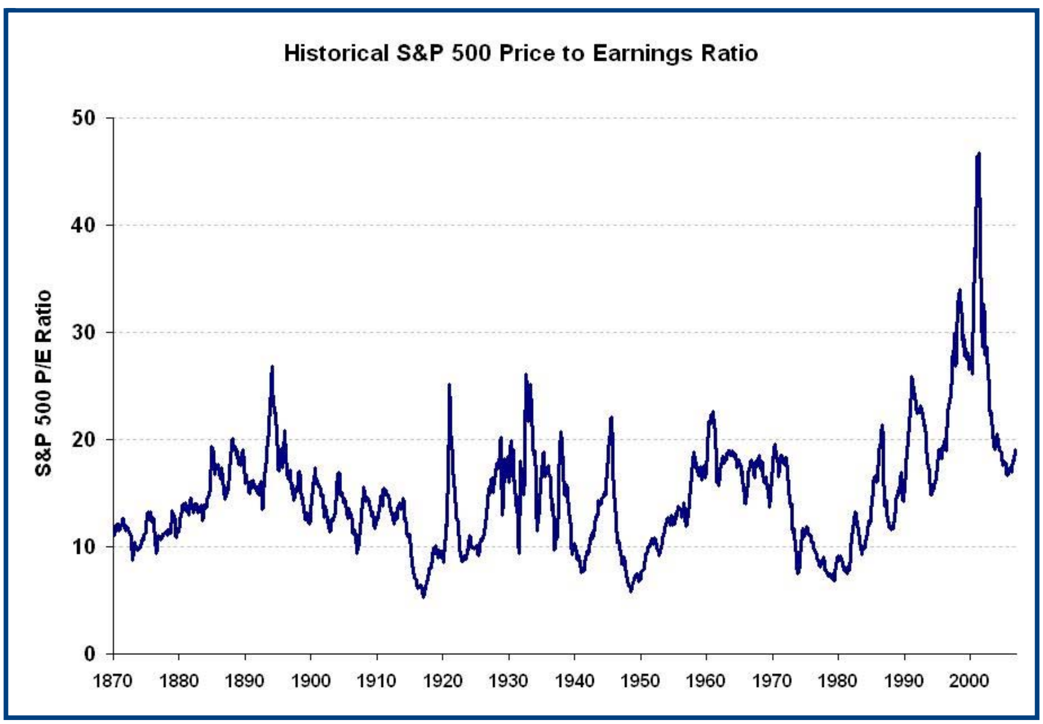
The common justification for today's high price-to-earnings multiples is that the information revolution beginning in the late 90's has dramatically increased U.S. productivity. At least in terms of corporate earnings, this argument is not supported by the data.

Going all the way back to 1870, corporate earnings adjusted for inflation have increased roughly 1.5% annually. The chart below illustrates just how consistent this growth has been over the last 140 years:



Click on the image above for a sharper version

Although corporate earnings grow steadily, prices are much more volatile and define the major bull and bear market turning points. Fundamentally, long-term stock market returns will be determined by the growth rate of corporate profits. But short-term returns will be largely influenced by price relative to earnings. Here is a chart of the historical price-to-earnings ratio for the S&P 500:



Click on the image above for a sharper version

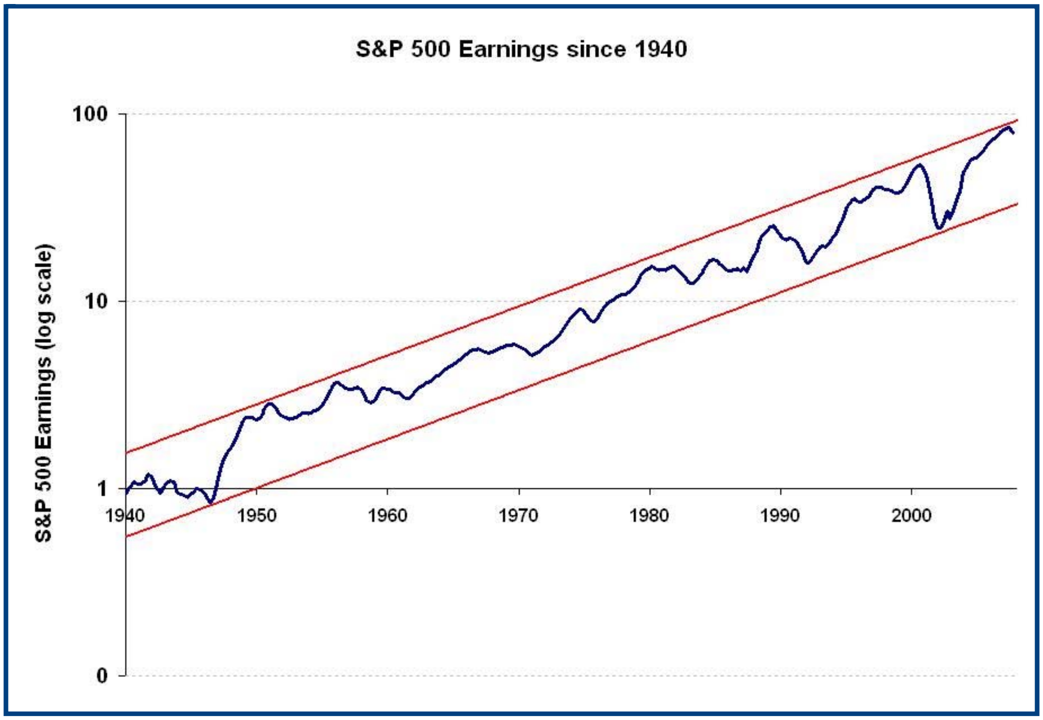
Even though stock market prices have declined from their 1999-2000 market peaks, they are still very expensive relative to historical norms. And given how consistent long-run earnings growth has been, there is no reason to think that historical norms no longer matter.

Predicting future returns

Future stock market returns can be estimated by two main components:

1. Future earnings
2. Future price-to-earnings multiple

For future earnings, **John Hussman** points out that corporate earnings have remained steadily within a 6.2% growth channel since 1940 (with inflation averaging 4.1%):



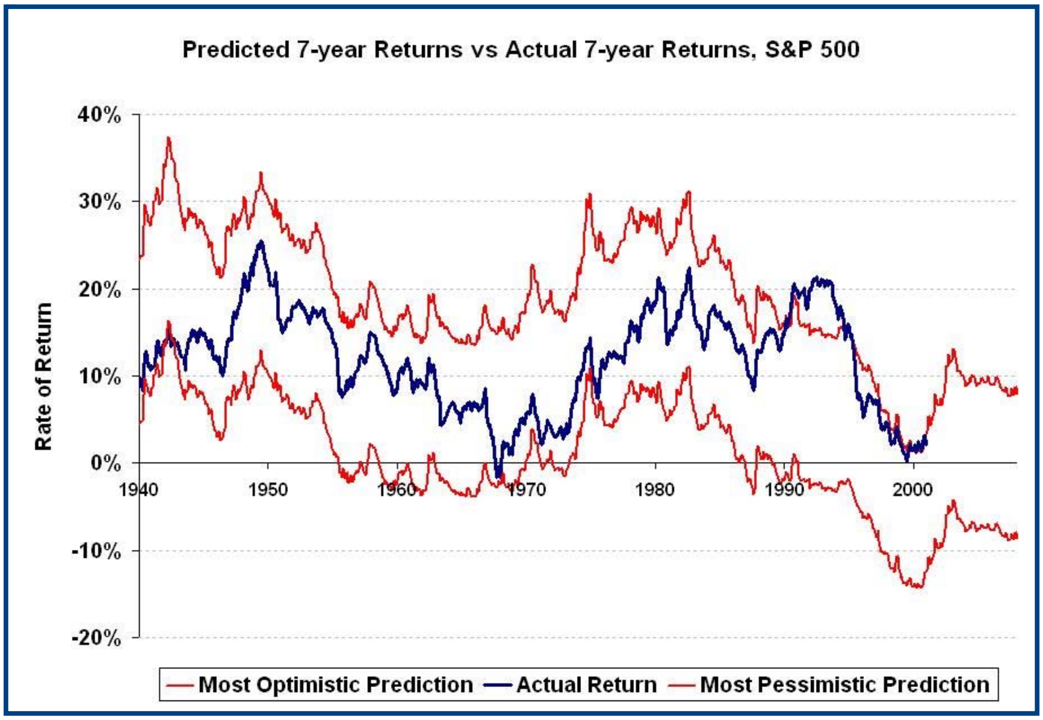
Click on the image above for a sharper version

Given the **housing slowdown** and the oncoming recession, I'd say it is quite likely that we are at a multi-year earnings peak. Indeed, today's stock market earnings are at the extreme upper end of the channel. For the future price-to-earnings multiple, let's assume that they will revert to the mean somewhere between 10 and 20. The current price-to-earnings multiple is 19.

Not only are stocks expensive relative to earnings, but the earnings themselves may be at the beginning of a major decline. That's a double-whammy to the downside for investors.

Based on these numbers, let's make a projection of future stock market returns for the next 7 years (so that the market has some time to adjust to long-run averages). An optimistic outcome would be that corporate earnings stay near the top of the channel and that the price-to-earnings ratio ends up near 20. A pessimistic outcome would be that earnings finish near the bottom of the channel and that the price-to-earnings ratio ends up near 10.

In the chart below, I have plotted 7-year future return projections going back to 1940 along with the actual realized return. In other words, I ask what I would have predicted with this methodology and then observe what really happened. The blue line represents the actual return and the red lines represent the optimistic and pessimistic projections:



Click on the image above for a sharper version

For the most part, actual returns lie within the upper and lower projections, the primary exception being the Internet Bubble in the late 1990s. Notice how favorable projections were at major market lows in the early 1940s and late 1970s. Even the most pessimistic outcomes would have produced double-digit returns! Today's market conditions are much less favorable.

The problem with today's market is that earnings and prices-to-earnings ratios are both near historical highs, leaving little room for the upside. **The only reason why returns have not been negative since 2000 is the extreme valuations of today's market.** In the current environment, the methodology predicts 7-year annual returns in the low single-digits at best and losses at worst. With inflation currently at 4.3% per year, even the most optimistic returns do not seem to be worth the risks to the downside.

Conclusion

By almost any measure of fundamental value, today's stock market is expensive relative to historical norms. I find no evidence that the high price-to-earnings multiples are justified, and I would expect the overall market to deliver below average returns for the next 5-10 years. There are substantial downside risks if corporate earnings decline in an upcoming recession, and from my perspective, these risks are not worth the limited upside potential.

In 1969, near one of the major bull market peaks (P/E = 18), Warren Buffet told his investors that he was closing up shop. Valuations were so expensive that he did not want to participate anymore. Roger Lowenstein reports in Buffett's biography:

> "Buffett reminded partners of a seemingly lost distinction: "Price is what you pay, value is what you get"...wary of jeopardizing past profits, Buffett did a remarkable thing. He quit. He stunned his partners with the news that he was liquidating Buffett Partnership. And now, at the height of a bull market, he was getting out.
>
> [In 1969, Buffett wrote], "I am not attuned to this market environment, and I don't want to spoil a decent record by trying to play a game I don't understand just so I can go out a hero."" (p. 114)

We see from the charts above that 1969 was near a bull market peak and that future predicted returns were quite low. Several years later, the market had tanked and by 1973 (P/E = 11) Buffett was back in the game:

> "[in 1973, Buffett] would run his finger down the price-earnings column of the stock table, and practically every P-E was in single digits. It was one of those rare times on Wall Street:

> America was being given away, and nobody wanted it. Buffett's reaction was instinctive: *Be greedy when others are fearful*." (p. 150)

Warren Buffett is the greatest value investor of all time. He buys stocks for their business value, not because he thinks they will go up in price. As for me, I see very little value in today's market. There's a reason why Berkshire Hathaway continues to invest abroad and holds over $40 billion in cash.

Please e-mail thoughts and comments to defomcduff@gmail.com
Back to main