

Siegel v Shiller on equity valuations

Robert Huebscher | Advisor Perspectives | 31 May 2017

Should you reduce allocations to US equities given the conventional wisdom that prices are "rich" and "due for a correction"? Jeremy Siegel says no – investors should expect 5% real returns from stocks over the long term. But Robert Shiller thinks that number should be much lower.

The two squared off in a keynote presentation at the recent CFA Institute Annual Conference in Philadelphia. Siegel is a professor at Wharton and author of *Stocks for the Long Run*. Shiller teaches at Yale, is the author of *Irrational Exuberance* and the winner of the 2013 Nobel Prize in Economic Sciences.

Shiller and Siegel have been friends for nearly 50 years, since they were both students at M.I.T. But their analysis of equity prices diverged sharply.

The question is whether the cyclically adjusted price-to-earnings (CAPE) ratio, as conceived by Shiller, provides a valid forecast of future prices. More specifically, the central issue upon which the two differ is the appropriate measure of earnings to use in the denominator of that ratio. Shiller uses S&P earnings but Siegel claims that a broader measure, the national income and products account (NIPA), is more appropriate.

SHILLER: THE CAPE RATIO WORKS JUST FINE

Shiller introduced the CAPE ratio in 1988, along with John Campbell, then his student. His rationale was that there is too much volatility in earnings over the course of a business cycle. Shiller developed the CAPE ratio with the conviction that, by averaging over a trailing 10-year period, one could look at "normalised" earnings over the course of one full business cycle.

Essentially, the CAPE ratio smooths out earnings to provide a forecast of stock prices.

Although Shiller is deservedly credited with popularising the CAPE ratio, the idea that earnings should be averaged and normalised over the course of a business cycle was suggested by Graham and Dodd in their book, *Securities Analysis*, published in 1934.

In his Conference presentation, Shiller provided data showing that the CAPE ratio, as well as price-to-earnings and price-to-dividend ratios, are above average. But, he said, the NIPA-based CAPE suggests that prices are near historical averages. He cited research showing that other metrics – the price-to-dividend ratio, the price-to-book ratio and volatility (based on the VIX) – also indicate above-average valuations.

The CAPE, however, is statistically the best predictor of future returns over horizons of five years or longer. Shiller said that if you combine the CAPE ratio and interest rates, it has an r -squared of 0.41 when regressed against future returns, thereby explaining nearly half of the variation.

Shiller has tested how well the CAPE forecasts returns in non-US markets and found that, in all but two countries, the CAPE is the most reliable predictor.

Based on the CAPE ratio, Shiller predicted 1% excess returns (over inflation) for US stocks over the next 10 years.

As for Siegel's suggestion that NIPA earnings should be used instead of S&P earnings, Shiller said that idea was "interesting" but "I have my doubts".

Shiller agreed with Siegel that NIPA earnings have greater integrity because they aren't changed by shifts in reporting regulations, such as the accounting standards set by the FASB. But he cited problems with NIPA earnings – they don't include foreign earnings and they don't deduct for bad debt losses. Most importantly, they measure a broader universe than just the S&P500 and include, for example, earnings from subchapter S corporations.

One of Siegel's contentions is that S&P earnings have been biased downwards as a result of particularly bad years, such as 2001 and 2008. But Shiller had a response: even if you remove the 2001 and 2008 earnings from the CAPE calculation, the ratio drops by only two points and is still above historical averages.

"The stock market in the US is highly priced," Shiller said.

SIEGEL: STOCKS FOR THE LONG RUN

Siegel has studied the very long-term performance of US equities. He has shown, for example, that since 1802 US stocks have had real (inflation-adjusted) returns of 6.7% per annum, far more than bonds (3.5%), Treasury bills (2.6%), gold (0.5%) or the US dollar (-1.4%).

Over that time period, the median P/E ratio was approximately 15. The earnings yield (1/15) translated almost exactly to the 6.7% real yield for stocks. Over the last 63 years, when more accurate accounting data was available, the median P/E was 16.97. It is now 21.4, which implies future real returns of 5.4%.

Siegel said that even a P/E ratio of 20 would predict 5% real returns, and 7% nominal returns, which are well above those of bonds. Inflation-protected US TIPS bonds with a 10-year maturity yield approximately 40 basis points.

Shiller assumes reversion to the mean CAPE, Siegel said. But that may not happen. According to Siegel, over the last 25 years we have been "way above" the average CAPE ratio, except for nine months during the Great Financial Crisis.

Siegel said that stocks are not going to revert to their historical mean of a P/E of 15. The reason, according to Siegel, is that the S&P operating earnings Shiller uses don't include writedowns and, as a result, present a much milder picture of the last two recessions.

Siegel acknowledged that the CAPE was the best predictor both when it was published and through the 1990s.

But he cited three reasons why the CAPE now gives overly bearish forecasts:

- The definition of GAAP earnings have changed over time;
- We are in a (perhaps permanent) low-interest-rate environment, which implies that P/E ratios should be higher, but not necessarily 6.7%; and,
- Over the last 140 years, it has become virtually effortless to own the market (index funds), which he said probably adds up to 2% of return for a given risk.
"There should be an upward trend to take into account the ease with which we can reduce idiosyncratic risk," Siegel said.

Siegel said a real return of 5.0% per annum, not the historical value of 6.7%, is reasonable for US stocks.

"They are definitely the asset of choice for your portfolios," he said.

THE PORTFOLIO CONSTRUCTION IMPLICATIONS

Whether stocks are overvalued makes for a great cocktail party discussions. But for many investors it has little significance. Investors who are early in the accumulation stage of saving for retirement should be allocating a significant portion of their portfolio to equities. They will be averaging in over a long time horizon and should not attempt to calibrate their allocation based on the historical reliability of valuation metrics.

But for some investors – particularly those at or near retirement – the issue takes on added significance. Those investors need to consider whether their assets are or will be sufficient to fund their living expenses over the course of retirement. That consideration should dictate their equity allocation – more so than whether they think equities are rich or cheap.

The conventional wisdom favors Shiller. Siegel is among a small minority of scholars and analysts who claim stocks are fairly valued or who predict real returns as high as 5% for the US markets. But the conventional wisdom has been wrong for most of the post-GFC period. During that time, once markets recovered from their 2009 lows, Siegel has been nearly alone

in forecasting strong performance for US stocks. His forecasts have been consistently more accurate than the conventional wisdom over that time period.

One issue that neither Shiller nor Siegel discussed was the transition of the US economy from manufacturing to services over the post-war period. Service businesses are inherently less vulnerable to competition and more profitable than manufacturing businesses. Most manufacturing industries are dominated by the low-cost competitor, which is why much of our country's manufacturing base has moved overseas, where labor is cheaper and currencies are weaker. As the US equity markets are dominated by service companies, it is logical to expect that normalised earnings and P/E ratios will be higher.

Perhaps the most telling advice was from Shiller, who said that the fact that long rates are so low suggests that there is a consensus for secular stagnation. "This is not science and cannot be proven right or wrong," he said. He said that consensus is popularised through a "narrative" that pervades public opinion.

If that narrative persists, then Siegel will be right for years to come. Low interest rates will undeniably support higher stock prices.



Robert Huebscher is the Founder and CEO of Advisor Perspectives. Bob founded Advisor Perspectives in 2007, following a 25-year career in the financial services and information technology industry. This article is reproduced with permission from [Advisor Perspectives](#).
