

# Why Stocks May Not Be Overpriced

Posted: 7/1/2020 by Jurrien Timmer

While they look pricey by some measures, Jurrien Timmer says they are not overvalued.



## Key Takeaways

- The Shiller CAPE is a method of stock valuation. It uses the 10-year average for earnings per share as the E in the P/E formula. It's often used with stock market indexes like the S&P 500® to understand whether the market is overvalued or undervalued.
- The Shiller CAPE currently points to an overvalued stock market but it doesn't account for several important variables: the level of interest rates, the equity risk premium (ERP), and the impact of dividends and stock buybacks (the payout ratio).
- Using the payout ratio (the combined dividends-per-share and buybacks-per-share) instead of EPS as the denominator in the P/E formula indicates that the current market valuation may be justified.

Is the stock market overvalued? That's a question on many investors' minds after the stock market's dramatic recovery since its March low.

A popular measure of stock market valuation is the Shiller 10-year CAPE (cyclically adjusted price to earnings ratio), which currently suggests the market is overvalued. But is this really the best metric for the current unprecedented market that so many investors (especially bearish ones) believe it is?

In my view, the answer is no. Using other measures, I believe the current market valuation may be justified. Here's why.

## What is the Shiller CAPE?

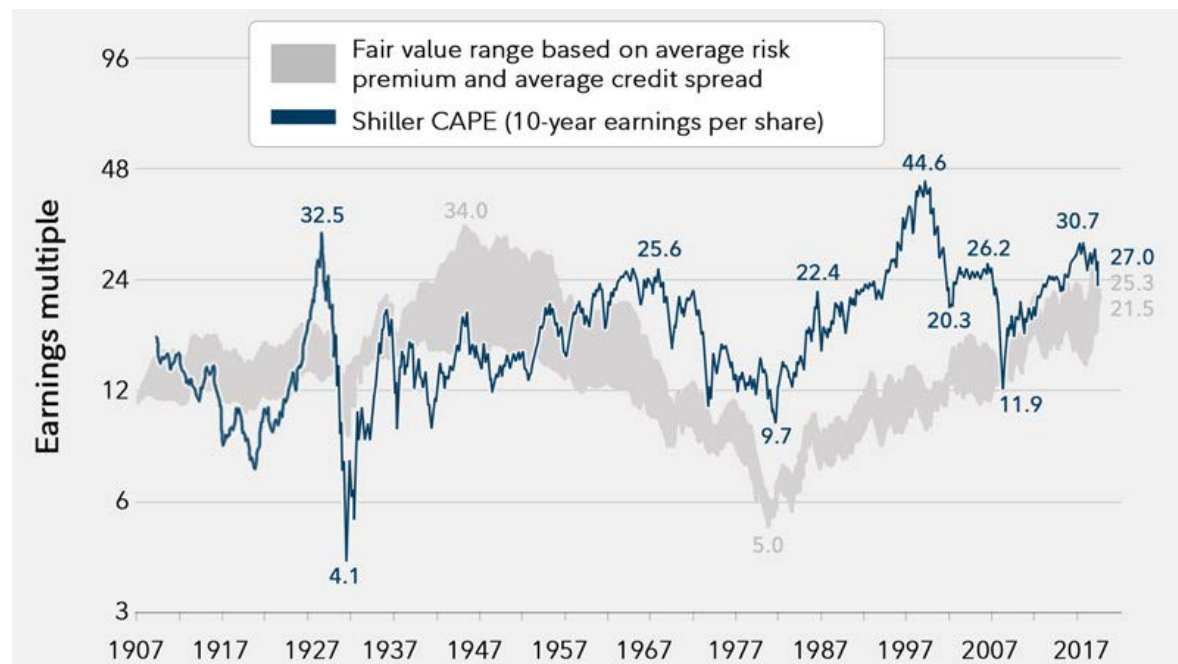
The price-to-earnings (P/E) ratio measures the current share price of a stock relative to the company's earnings per share (EPS). It can help you compare a company to its previous price, as well as to other companies. This is among the most widely used valuation metrics by investors.

A related valuation tool that some investors prefer over P/E is the Shiller CAPE ratio. It uses the 10-year average for earnings per share in the P/E formula. Robert Shiller, who developed this metric, tweaked the P/E ratio formula to account for the cyclical nature of markets. For this reason, many investors believe it is a superior valuation metric. Like the P/E ratio, Shiller's CAPE ratio can be used with stock market indexes like the S&P 500 to understand whether the market is overvalued or undervalued.

## Right now, the Shiller CAPE suggests the market is overvalued—but is it?

The chart below shows the Shiller CAPE, or the S&P 500 price index divided by the 10-year average for earnings per share. Currently, the Shiller CAPE ratio is 27.0x, which implies the market is at the 92nd percentile of all history, with only the 1929 peak and the dot-com bubble producing a higher valuation. Recall that higher valuations imply an overbought (or expensive) market. Consequently, at first glance, this is not good company to be in.

## Valuing the S&P 500 using Shiller CAPE



Monthly data as of 6/19/2020. Source: FMRCo, Factset, Bloomberg

But, as can be the case with valuation tools, I believe the Shiller CAPE leaves out some crucial nuances. For one, it doesn't take into account the level of interest rates or the equity risk premium (ERP). (The equity risk premium, ERP, is the additional return that investors expect to earn over Treasury bonds or the risk-free rate of return). Because Shiller CAPE does not explicitly account for these factors, I believe it may not be the best metric to use in this market.

Secondly, it doesn't take into account the percentage of earnings being distributed back to shareholders via dividends and share buybacks. The risk premium and the payout are critical pieces of the valuation puzzle, which is why I am a fan of the discounted cash flow model (DCF), which does account for these factors.

## The discounted cash flow model suggests valuations may be justified

The DCF is a valuation method used to estimate the value of an investment based on its future cash flows. DCF analysis attempts to figure out the value of an investment today, based on projections of how much money it will generate in the future. This applies to both financial investments for investors and for business owners looking to make changes to their businesses.

Let's take the dot-com peak in 2000. The CAPE was 44.6x back then. But did you know that the implied equity risk premium (ERP) was negative in 2000? It was around -2.5%, whereas today it is +4%. The takeaway: Even though the Shiller CAPE suggested stocks were expensive in 2000 (as it does today), what's different is that the ERP in 2000 also suggested a bearish outlook whereas today's ERP is actually positive.

Also, back in 2000, the payout ratio was around 60%, whereas today it is closer to 90%. More earnings going back to shareholders. That means a higher valuation (i.e., stocks are not expensive) is warranted, per the DCF. These are important dimensions of the valuation puzzle and, in my view, show that in 2000, the market was actually even more overvalued than the CAPE ratio suggests.

And then there is the level of interest rates, or the risk-free rate (RFR). The chart above, "Valuing the S&P 500 using Shiller CAPE," shows two gray lines. I think the range in between the two lines gives a sense of the fair value based on the level of interest rates and an average ERP.

One line shows the RFR + 4% ERP (the realized ERP since 1926), and the other shows the inverse ("P/E") of Moody's BAA corporate bond yield.

After all, the BAA investment-grade yield is just the risk-free rate (the yield on a Treasury security) plus a credit spread (the difference between the yield on a Treasury security and a bond with more credit risk). That's the same structure as the earnings yield for stocks—which consists of the Treasury yield plus the equity risk premium.

The formula for earnings yield is earnings divided by price per share. If you turn the earnings yield upside down (price over earnings instead of earnings over price), you get the P/E for stocks. If you do the same for the BAA, you get a "P/E" for bonds. The inverse of the BAA yield (the "P/E" of BAA bonds) is a proxy for the P/E of the stock market, since the stock P/E should, in theory, behave similarly to the BAA bond P/E.

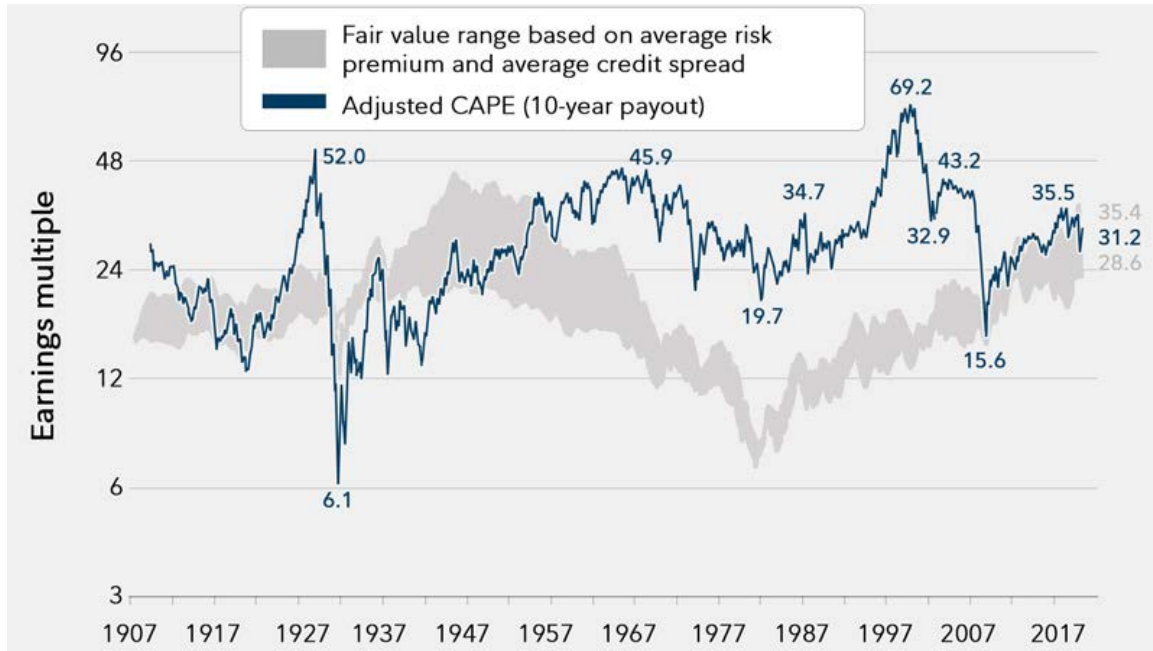
The chart, "Valuing the S&P 500 using Shiller CAPE," shows that on the basis of those two metrics, the market's current valuation is justified.

Now, let's take this a step further and create a modified CAPE using the payout ratio instead of earnings. Prior to the 1990s, the market's payout was mostly just in the form of dividends, but in recent decades share buybacks have become an important source of cash being returned to shareholders.

The chart below shows the 10-year CAPE using the combined dividends-per-share and buybacks-per-share instead of EPS. This changes the story and shows that the SPX is actually at the 65th

percentile instead of the 92nd. And again, using the level of interest rates and an average risk premium as a proxy, one could argue that current valuation levels seem to be more than justified.

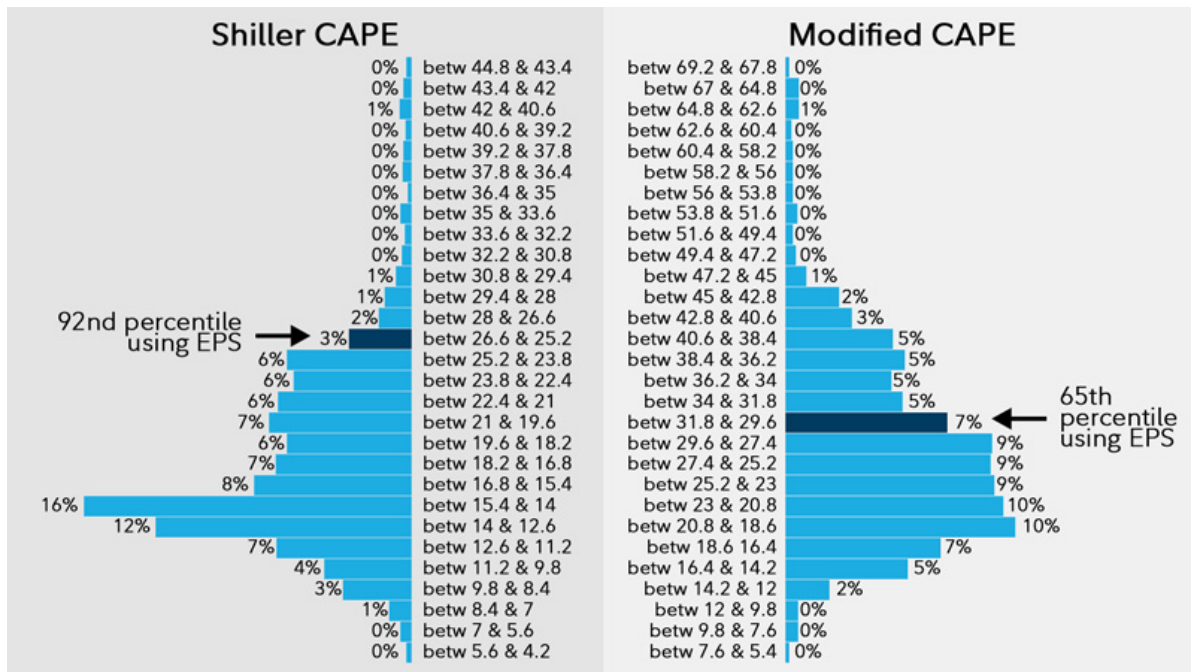
## Valuations



The assumption here is that the payout is 75% of earnings. To find the BAA P/E, I multiplied by 75% to come to a "payout P/E" of the BAA. Monthly data as of 06/19/2020. Source: FMRCo, Factset, Bloomberg.

In the chart below, you can see that using a modified CAPE that accounts for the payout (right), the market is less expensive than if we just use EPS (left). It's above average but not to the extreme of the commonly referenced CAPE ratio.

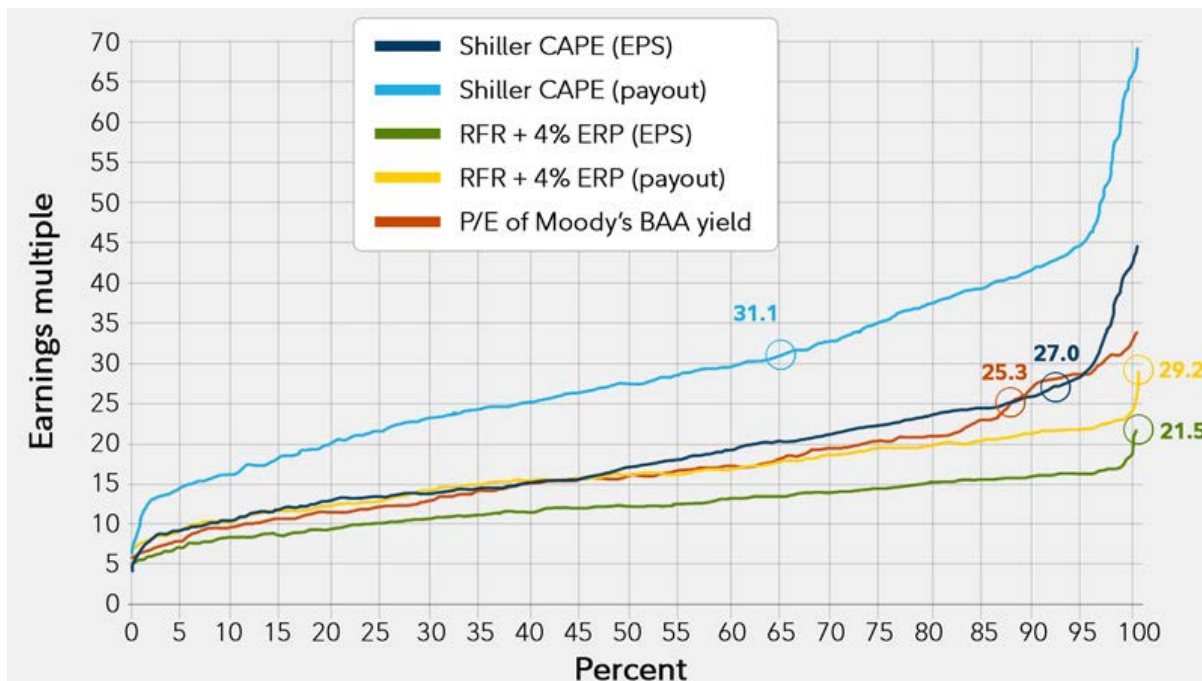
## Shiller CAPE vs. modified CAPE



As of 06/19/2020. Source: FMRCo.

And here is the percentile ranking since 1881.

## Equity valuation



Monthly data as of 6/19/2020. Source: FMRCo, Factset, Haver, Bloomberg, Robert Shiller.

## In conclusion

There is no getting around the fact that the CAPE ratio is widely used, mostly as evidence that the market is overvalued. The permabears—investors that remain convinced the market is overvalued, regardless of evidence suggesting the opposite view—especially love to trot out this trusty anchoring device. But, in my view, the reality is more complex, and like the DCF, it comes down to determining the correct ERP, and what role dividends and buybacks will play in the future.

If it turns out that buybacks play a smaller role in the future than they have in the past (which, I think is a plausible outcome if there is a regime change in Washington in November), then the modified CAPE will converge toward the Shiller CAPE.

Currently the level of announced buybacks is tracking well below 2018 and 2019 and in line with 2017. We will need to watch this carefully, especially given that it's an election year.

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