

A Better Approach to Valuing Stocks

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Central Issue of the Paper

In the paper titled "Equity Markets Valuation Using CAPE," Rémy Estran and Olivier Jéséquel attempt to answer an old and ongoing question among financial participants: "Are stocks undervalued or overvalued?" This question is of the utmost importance given its considerable investment implications. One way to address the issue of determining whether the stock market is relatively cheap or expensive, is to use the Cyclically Adjusted Price-Earnings ratio (CAPE), a measure developed in 1998 by the Nobel Prize-winning economist Robert Shiller of Yale University and his former colleague Prof. John Campbell (now at Harvard).

Approach Employed by Paper

What is the Cyclically Adjusted Price-Earnings (CAPE) ratio?

This measure is the real (i.e. inflation adjusted) index price level divided by a 10-year average of real earnings. By using a 10-year average, the CAPE reduces the cyclical element of earnings' fluctuations, and thus is particularly appropriate for comparing valuations over long horizons - whereas the traditional price earnings ratio is more business-cycle sensitive and volatile. The CAPE ratio is often presented as one of the best forecasting models for long-term equity returns.

CAPE as a market timing tool?

The advantages

- Historically, low CAPE values, i.e. below 10, have been followed by higher stock market returns, and conversely, high valuations, i.e. CAPE values above 25, have generally led to lower expected returns, and increase risks of major stock market sell-offs. For example, the CAPE correctly warned in the years before 1929, 2000, and 2007 that the US stock market was relatively expensive – with CAPE values higher than 25, far above its 20th-

century average of 15.2 – and the market subsequently crashed. Hence, as a mean reverting indicator of market valuation, the CAPE can be useful in a world where investors sometimes forget that trees do not grow to the sky.

- There is a strong correlation between the CAPE ratio and market inflection points. Most bullish markets were preceded by low CAPE values, while bearish markets followed high CAPE measures.

The drawbacks

- When it comes to market timing, the CAPE effectiveness is largely questionable. Their research showed that in the short-term, there is no clear relationship between current CAPE and cumulative price returns over 1 year. As Shiller acknowledged himself, the “CAPE was never intended to indicate exactly when to buy and to sell.” In such cases, the CAPE has been a poor timing indicator, and blindly translating the ratio into buy or sell orders would have been disastrous for investors.
- Another flaw in the CAPE is related to the changes in earnings computation since the early 1990s. The introduction of the mark-to-market accounting by the Financial Accounting Standards Board impacted the way US GAAP (Generally Accepted Accounting Principles) earnings are calculated. These new standards have led to a downward bias in earnings during market downturns, when asset prices are depressed, and heavy losses are potentially concentrated in few financial stocks. This results mechanically in an increased CAPE, and subsequently in lower forecasted equity returns.
- Potentially both a strength and a weakness, the CAPE does not take into account the current market environment.

Findings of the Paper

Although the CAPE was never intended to be an indicator of impending market crashes, high CAPE values have been associated with such events and conversely, low CAPE values have gone hand in hand with high cumulative long-term price returns.

Moreover, given the strong correlation with the CAPE and long-term equity returns, this measure can be a valuable input for any institutional investor willing to identify which equity markets are likely to offer the best potential. From the initial portfolio construction to the periodical allocation review, this CAPE assessment can be made regularly over the life of the equity investment program.

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