



US CAPE and q chart.

The q data are updated to $30^{\rm th}$ June 2023 and for CAPE to $31^{\rm st}$ March 2023.

The S&P 500 was at 3968.559 at $31^{\rm st}$ March 2023 when quoted shares including financials were 73.5% above fair value according to CAPE and at $12^{\rm th}$ September, when the S&P 500 was at 4461.9, 82.7% above. As at $30^{\rm th}$ June non-financials were 124.6% above fair value according to q, and at $12^{\rm th}$ September 127.9% above fair value.

The q values are taken from Z1 Table B.103 and probably understate the degree of overvaluation because: (i) The depreciation rate used by the BEA for IP should be 100% and not the current rate used of around 24% (latest data 2021). (ii) As the aim is to value the stock market, there should be no discount attributed to unquoted (closely held) companies. The discount used appears to be 25%. Allowance for these has, however, little impact on the degree of overvaluation, because the average $\log q$ ratio rises as well as the final and the degree of overvaluation. The result is that at 30th June non-financial companies were 124.6% above fair value if the Z1 ratio of market value to net worth is used and 129% if this is adjusted to allow for the under-pricing of unquoted shares and the overvaluation of net worth.

Data for my calculations of q are taken for 1900 to 1952 from Measures of Stock Market Value and Returns for the Non-financial Corporate Sector 1900-2002 by Stephen Wright, published in the Review of Income and Wealth (2004) and for 1952 to 2023 from the Financial Accounts of the United States ("Z1") published by the Federal Reserve. Data for our calculations of CAPE are taken from the data published on Robert Shiller's website, updated if necessary from data published by Standard & Poor's. Data on net worth are only available annually before 1952 and I have calculated the quarterly data by interpolation assuming that changes are evenly spread over each year. Market value data are calculated by adjusting the year-end figures for the quarterly value of the S&P 500 or its equivalent as shown by Robert Shiller.

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