

# ECONOMICS FOR ALL

SG Economic and Sector Research

## Stock markets: rational exuberance?

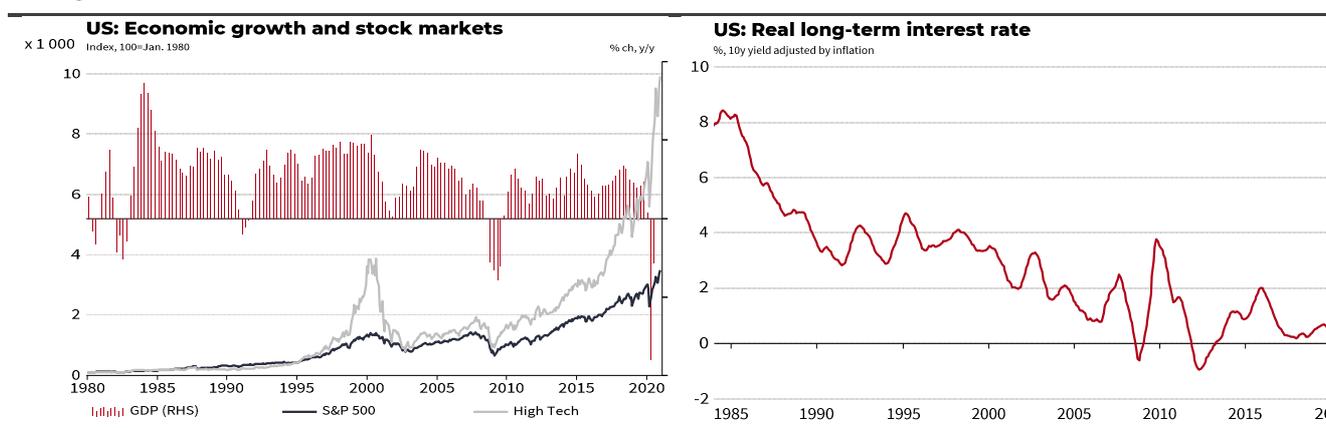
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*Robert Shiller, winner of the 2013 Nobel Prize in Economics, recently created the “Excess CAPE yield” or ECY indicator, which gives credit to the hypothesis under which, in today’s ultra-low interest rate environment, equity markets are not operating in a bubble. But the persistence of low rates can lead to an accumulation of financial vulnerabilities.*

**To say that exuberance has taken hold of stock markets is an understatement.** Wall Street, in particular, keeps setting records, while bond prices (which vary inversely to interest rate levels), notably government bonds, have reached record highs, with interest rates remaining at historically low levels. At the same time, the economy has relapsed with the second wave of COVID-19, credit quality has deteriorated and there could be a sharp rise in bankruptcies and unemployment once safety nets are removed. There is currently a spectacular disconnect between financial markets and the real economy.

### The great disconnect



Source: Refinitiv.

### This exuberance is not necessarily irrational

**Are we witnessing the effects of a speculative bubble on financial markets, US stock markets in particular, that is sooner or later bound to burst?** On 5 December 1996, Alan Greenspan, the President of the US Federal Reserve, used the term “irrational exuberance” for the first time in describing what he saw as the development of a speculative bubble on US stock markets. In 2000, the book by Robert Shiller – winner of the 2013 Nobel Prize along with Eugene Fama and Lars Peter Hansen for their empirical work on the evaluation of assets – aptly titled “Irrational Exuberance”, examined a century of financial history in order to describe the factors at the origin of a financial or real estate bubble. For Shiller, the irrational exuberance of investors, victims of psychological biases (overconfidence, herd mentality, trend effects, etc.), is the basis for a speculative bubble.

**Shiller is famous for having predicted the 2000 stock market crisis and the 2007 real estate crisis.** To evaluate whether a stock is undervalued or overvalued, he designed the CAPE ratio (for “Cyclically Adjusted Price-Earnings”), which represents the relationship between a stock’s real price (adjusted for inflation) and the average real profits per stock over the 10 previous years. Today, this ratio reflects, for the US market, values greater than those recorded on the eve of the stock market crash of 1929.

However, **Shiller et al.<sup>1</sup> consider that current stock market valuations are not unreasonable**, for two main reasons: the composition effects of stock market indices, and the exceptionally low level of interest rates. The considerable weight of a handful of superstar companies in US stock market indices, including GAFAM (representing more than 40% of Nasdaq and nearly 25% of the S&P 500) which have seen record profits thanks to the tremendous boost given by the pandemic to the digital transition, largely explains the historically high level of the US CAPE ratio. In other developed regions whose stock markets are less dependent on Big Tech, the CAPE ratios have returned to their pre-pandemic levels (Europe, Japan) or remained well below them (United Kingdom).

### **Ultra-low interest rates are a powerful support for equity markets...**

**For Shiller et al., the unusually low level of interest rates is another justification for high stock valuations** since the future flows of their dividends are now being discounted at a lower interest rate. To demonstrate this, the authors created the ECY indicator (for “Excess CAPE Yield”), calculated by inverting the CAPE ratio to obtain a yield, then subtracting the real ten-year interest rate. This indicator demonstrates that today, despite the high CAPE ratios, ultra-low rates are making stocks more attractive than bonds. The enthusiasm for stocks can therefore, at this stage, be rationally explained.

### **... and the seeds of the next financial crisis?**

This exuberance, however rational, should not lead us to ignore the **accumulation of financial vulnerabilities resulting from a prolonged period of ultra-low rates**. A low-rate environment encourages the use of debt leverage, leads some investors seeking yield to take excessive risks and contributes to an erosion of credit standards and a potentially unsustainable rise in asset prices, including real estate assets. In this, it is a source of distortions and risks for financial stability.

**The pandemic has considerably amplified the risks confronting the global economy** (the explosion of government and corporate debt, the sharp increase in leveraged financing, the rise of unemployment and inequalities, the polarisation of the political system and the electorate, etc.). Even the rationality of market exuberance does not guarantee its sustainability.

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<sup>1</sup> Robert J. Shiller, Laurence Black, Farouk Jivraj (2020), “Making Sense of Sky-High Stock Prices”, November 30.

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