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A financial bubble: to be or not to be?

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While Wall Street is setting record upon record, many observers are asking whether a financial bubble might be on the cards. But do bubbles exist? In 2013, the Nobel Prize in Economic Sciences was awarded to two researchers with opposing points of view: for E. Fama, bubbles do not exist because the markets are efficient; for R. Shiller, bubbles exist because human behaviours often deviate from rationality.

A financial bubble, also referred to as a « speculative bubble », « price bubble » or simply a « bubble », **is generally defined as a situation where the price of a financial asset significantly and persistently exceeds its intrinsic value**, which is defined as the discounted value of the anticipated future dividends.

For some economists, however, bubbles do not exist. This is notably the case of the **proponents of the Efficient Market Hypothesis (EMH),** which was developed in the 1960s by Eugene Fame, and which quickly became the central paradigm of modern financial theory.

The EMH states that, in a sufficiently developed financial market, **asset prices reflect all available and relevant information.** This has usually four implications:

- **Prices are, at all times, in line with the intrinsic value of assets**, as they are correctly assessed by rational agents on the basis of all available information (in other words, the overvaluation or undervaluation of a financial asset is impossible).
- Only new information – unknown to the market and, by construction, not anticipated – can cause fluctuations in prices, which are thus following a random walk.
- Over the long term, it is not possible for an individual investor to generate a risk-adjusted performance that beats the market.
- Prices provide economic agents with a reliable signal allowing an optimal allocation of savings in the economy.

It is important to note that **while bubbles do not exist under the EMH, crises do exist,** but they can only be caused by exogenous, extreme and random shocks.

In 2013, the Nobel Prize in Economic Sciences was awarded jointly to **Eugène Fama and** his main critic, **Robert J. Shiller, one of the pioneers of behavioural finance,** for « their empirical analysis of asset prices ».

For Shiller, speculative bubbles do exist. In his opinion, this is evidenced by the « **excess volatility** » of the prices of financial assets in relation to variations in their intrinsic value. Shiller draws on other sciences (psychology, sociology, anthropology, politics, neuro-sciences, and so on) to show that individual behaviour under uncertainty often deviates from rationality.

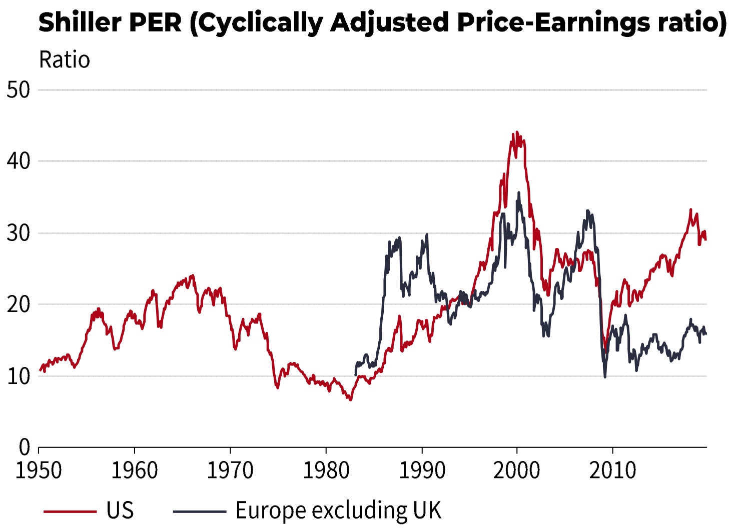
The proponents of behavioural finance challenge the assumption of market efficiency based on two key assumptions:

- Investors are not fully rational because they are victims of psychological bias (over-confidence, gregarious behaviour, herd-behaviour, fashion effects, etc.) in the processing of information.
- The simultaneous action of a large number of irrational investors can lead to significant valuation anomalies (over- or under-valuation with respect to fundamentals).

For Shiller, irrational exuberance that can propagate to the point of becoming dominant, thereby, creating a self-fulfilling prophecy[1], **is the psychological basis of a speculative bubble.**

Today, Wall Street is setting record upon record. So, are we facing a financial bubble?

Shiller has developed a stock valuation gauge, the CAPE (for Cyclically Adjusted Price-Earnings Ratio), also known as Shiller's PER, which aims to correct the shortcomings of the classic Price Earnings Ratio (PER) by taking the average annual earnings over a period of ten years to smooth the effect of the business cycle.



The CAPE for the United States is now 28.95 (after reaching 33.31 in January 2018), a level similar to that seen in the years before 1929 (30) and higher than in any other period since 1881 barring the years prior to the bursting of the tech bubble in 2000 when it reached 44.20.

So, bubble or no bubble: that is the question. The reader looking for definitive arguments for or against the postulate of market efficiency may be disappointed. Probably also, in 2013, the members of the Nobel Committee did not want to decide between the assumption that prices do not deviate from efficiency and that of the existence of bubbles.

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[1] A self-fulfilling prophecy is an assertion that induces behaviours that validate it. For example, if a majority of investors believe that the price of an asset will rise, there will be a craze for this asset, which will cause its price to increase.

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