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# The Market Efficiency Debate is Alive and Kicking

By Theo Vermaelen

**Are markets fundamentally efficient or inefficient? Economists are polarized, and the Nobel Prize Committee is playing both sides of the debate.**

The 2013 award of the Nobel prize in Economics to both Eugene Fama and Robert Shiller, two academics who strongly disagree on whether markets are efficient was a balancing act in the debate about market efficiency. Fama, the father of the efficient market hypothesis sits opposite Robert Shiller, who believes markets are irrational and inefficient.

While the efficient market hypothesis has come under attack since the financial crisis, its prominence here demonstrates its contribution to our understanding of stock prices and I think recent criticism of it is misplaced.

The hypothesis states that stock prices reflect all publicly available information that is relevant for the pricing of securities. Another way to put it is that you can't make abnormal returns on the basis of publicly available information. This is controversial because it is difficult to test. Testing whether you can make abnormal returns on the basis of publicly available information requires specifying what a normal return is. If my model predicts that the normal return is 10% and I earn 11% it could either mean that I have earned an abnormal return of 1% or my model is wrong.

Much of the disagreement in finance is about whether the "abnormal" return is really a "normal" return, i.e. a compensation for risk. The first serious model of market equilibrium was the Capital Asset Pricing model (CAPM) that predicts that the "normal" or expected rate of return on an asset is positively related to beta. And indeed, the early empirical tests found a strong positive relation between long term returns and beta. However, subsequently researchers found that besides beta returns are also driven by firm size and book-to-market. Small firms outperform large firms and value stocks tend to

beat growth stocks.

The efficient market hypothesis was saved by replacing the CAPM by the Fama-French three-factor model, which argues that size and book-to-market are proxies for additional risks (besides beta) that are rewarded by higher expected returns. So anyone who claims to earn excess returns has not only to control for beta but also for firm size and book-to-market.

Critics of the efficient market hypothesis confuse market efficiency with perfect forecasts. The market crash after the collapse of Lehman Brothers is not proof of market inefficiency. The default and the systemic banking crisis that followed was an unexpected event. Robert Shiller's main challenge to market efficiency is based on the argument that stock prices are more volatile than dividends. This argument ignores the fact that companies follow stable dividend policies so stock prices should be less volatile than dividends, even in an efficient market. It is not true that a company can lower its volatility by declaring that from now on it will pay the ultimate stable dividend: zero. Stock market volatility is driven by uncertainty about free cash flows, growth opportunities and changes in the discount rate, which in my opinion makes it problematic to judge whether volatility is excessive or not.

What everyone agrees upon is that insiders may have better information than the market. That's why managers will often dismiss negative stock market responses by arguing that the market does not know all the facts. In some cases firms will try to exploit this perceived ignorance by buying back stock. Note that such strategy only makes sense if the market underreacts to the buyback announcement, which is publicly available information.

After researching this topic for 20 years<sup>[1]</sup> and observing the excess returns of the PV Buyback USA fund I launched with my colleague Urs Peyer, I am convinced that the market does indeed underreact to buybacks. Moreover research also shows that firms issue equity (for example to finance an acquisition) when their shares are overvalued. While the market responds positively to buyback announcements and negatively to equity issues and equity financed acquisitions, the response is too small. So managers are able to time the market to benefit long term shareholders. Again strong believers in market efficiency will argue that the excess returns are a result of the fact that we have not appropriately adjusted for risk, so I expect that the debate about efficient markets will continue in the foreseeable future.

**[1]** For some recent evidence on global buybacks see “Buybacks Around the World” by Alberto Manconi, Urs Peyer and Theo Vermaelen, INSEAD working paper

#### **Find article at**

<https://knowledge.insead.edu/economics-finance/market-efficiency-debate-alive-and-kicking>

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#### **About the author(s)**

**Theo Vermaelen** is a Professor of Finance at INSEAD and the UBS Chair in Investment Banking, endowed in honour of Henry Grunfeld. He is the Programme Director of **Advanced International Corporate Finance**, an INSEAD Executive Education programme.