

Markets are not magic

Despite their pervasive contributions to economic growth and efficiency, it is important to remember markets are not magic when transparency fails, argues David Rowe

John Taylor, Mary and Robert Raymond professor of economics at Stanford University, recently noted that arguments about the causes of the current economic crisis usually fall into one of two viewpoints: a) the market did it; or b) the government did it.¹ Taylor himself leans strongly towards 'the government did it' view. He emphasises that the maintenance of historically low interest rates from late 2001 into early 2004 laid the groundwork for an unsustainable housing bubble. An alternative view is that international market trends, especially the rise of China as a competitive force that constrained price pressures, induced low interest rates and fed the housing boom. Taylor also highlights the explicit role of Fannie Mae and Freddie Mac in fuelling the housing boom by increasing leverage and expanding their purchases of securities backed by high-risk subprime mortgages. On this issue he agrees with Alan Greenspan and others, who tried in vain to constrain the agencies at the time.

Despite legitimate reasons to blame the active role of government in facilitating and promoting irresponsible subprime lending, markets must bear part of the blame. It is incumbent for supporters of free markets such as myself to assess what went wrong. How did so many seemingly sophisticated institutions end up holding potentially lethal volumes of toxic assets for which there was no market and no objective means of valuation?

As noted in last month's column, markets have been apotheosised as the ultimate arbiter of economic valuation and capital allocation for some 25 years. In effect, the efficient markets hypothesis (EMH) had become an article of faith. One reason market economies are more dynamic than planned economies is that a central authority cannot command more than a tiny fraction of the information marshalled routinely by the broad range of market participants. In addition, history clearly shows political control of investment decisions is ultimately captured by vested interests. This tends to underfund new technologies that threaten established firms and undermines the necessary process of creative destruction that drives economic progress.

Critics of the EMH generally base their scepticism on two considerations. Proponents of

behavioural economics argue that people often act quite differently than the rationally optimising *homo economicus* of classical economic theory. Real people, they contend, exhibit many consistent behaviour patterns that cannot be justified based on rational optimisation. One of these is paying too much attention to irrelevant sunk cost. People who have lost money on a stock tend to be reluctant to sell it at a loss, hoping to recover at least what they paid. This is a form of endowment effect, where people who would not choose to buy something are oddly reluctant to sell if it is given to them. Such behaviour, they argue, undermines the rational maximising assumptions of the EMH.

The second consideration, which I believe played an important role in the current crisis, is the influence of imperfect information. Classic economic theory starts from the assumption of perfect and costless information. Having spent my whole career trying to squeeze information from raw data, often at great effort and expense, I am acutely aware that real-world markets violate this assumption. Market efficiency is fairly easy to demonstrate in the pricing of goods and services driven by fundamental supply and demand. It is in the market for investments, where value derives from uncertain future performance, that things become especially problematic. EMH advocates argue it is not necessary for all market participants to have full information; it is only necessary for a critical segment of the market to have relevant information and to act upon it for prices to be driven to their rational equilibrium levels.

Clearly, the ever-increasing complexity of collateralised debt obligations, driven by compound repackaging and lack of ready access to the characteristics of the underlying collateral, tested this premise to the breaking point.² When the information required by investors to make sensible independent judgments becomes sufficiently complex and inaccessible, the normal efficiency of markets can fail. The central limit theorem requires that the underlying random variables be independent for the behaviour of sums or averages of these to be normally distributed. Similarly, the EMH requires a minimum degree of transparency for markets to operate effectively. When this condition is violated in the extreme, it is essential to remember that, valuable as they are in a wide variety of circumstances, markets are not magic. Assuring sufficient transparency for markets to perform their function effectively is an important role for public policy. ■

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¹ Systemic Risk and the Role of Government – John Taylor, keynote speech at the Atlanta Federal Reserve Bank Conference on Financial Innovation & Crisis, May 12, 2009

² See Rowe, D. The Dangers of Complexity, *Risk*, April, 2005, p73, www.risk.net/public/showPage.html?page=216521