Efficient Market Theory – when will it die?

By David Harding, February 2016

Imagine if the economy as we know it was built on a myth. Imagine if that myth was the foundation stone on which has been erected the mainstream financial systems that control the global economy – the great bazaars of stock markets, bond markets, fiendishly complex financial instruments, credit default swaps, futures and options on which the fortunes of billions rest. Imagine if the myth was the key cause of the global crash in 2008 – and if its perpetuation today threatened another catastrophic crash in the future.

We don't have to imagine. The myth is Efficient Market Theory (EMT) – the idea that markets are always 'rational'; that they perfectly reflect all knowable information and always produce in some sense the 'right' price – and the myth is alive, kicking, and dangerous.

EMT has deep roots. As far back as the late 19th century a man named George Gibson wrote a book on The Stock Markets of London, Paris and New York, in which he asserted that when "shares become publicly known in an open market, the value which they there acquire may be regarded as the judgment of the best intelligence concerning them." The seeds were being planted for the idea that markets are inherently wise and rational – and that they should be left to follow their own logic wherever possible.

It was not until the 50s and 60s that the idea really took hold, with academics at the Chicago School of Economics becoming forceful advocates for EMT. One of them, Eugene Fama, wrote a Ph.D. concluding that stock prices follow a 'random walk' pattern of movement.

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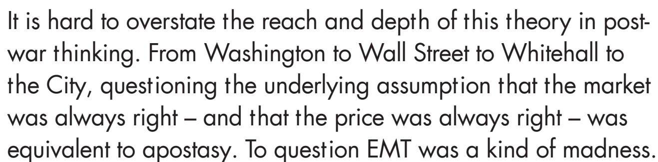
It was suggested that price changes could be modelled on a simple equation from physics known as the heat diffusion mechanism.

As a physicist by training myself, I can see the appeal of this theory. It is simple, neat, pure, logical. Indeed EMT is such a compelling idea that a whole tower of academic thought and public policy-making was built upon it. From the institutions of Chicago and Massachusetts the idea of markets being perfectly rational spread to other business schools around the world; from business schools to central banks; from central banks to governments.

Through the ideas of Milton Friedman, Efficient Market Theory was swallowed by Mrs Thatcher and her ally Ronald Reagan. Over the course of four decades the global economy became thoroughly financialised and built around the central tenets of EMT. Its mathematical equations led to the explosion of over-the-counter derivatives, tailor-made options, futures and swaps. Its modelling told us that those with subprime mortgages would behave in the same random way as scientific particles oscillating in liquid. Its inherent belief that 'the markets know best' led democratic politics to become more and more timid about regulation. Its implications led to markets becoming as free and unfettered as possible.

The central tenets of EMT became like the oxygen breathed by the economic and political establishment. If you held a senior position in banking, investment management or insurance and had a view too far from the professional consensus, you would have been gradually pushed aside.

Those that spoke out against the consensus – like Warren Buffet and George Soros – were independent thinkers who could do so without risking their own career. But those in the mainstream were herded ever more tightly into the belief system surrounding EMT. Efficient Market Theory became Efficient Market Fact.



It is hard to overstate the reach and depth of this theory in post-war thinking. From Washington to Wall Street to Whitehall to the City, questioning the underlying assumption that the market was always right – and that the price was always right – was equivalent to apostasy. To question EMT was a kind of madness.

The trouble is that EMT itself is a kind of madness, or at least the wholesale adoption of it is. This theory of rational markets treats economics like a physical science – like Newtonian physics – when in fact it is a human or social science. Human beings are prone to unpredictable behaviour, to over-reaction or slumbering inaction, to mania and panic. The markets that reflect this behaviour do not assume some supra-human wisdom, they can and sometimes do reflect that volatility.

It is all there in the history of finance, in the bull and bear markets, the 17th century tulip mania which saw a single bulb sold for the same value as 12 hectares of land. Was this the right price? Then there were the sudden, inexplicable plunges of 1973-74, when stocks lost almost half their value, or the day in 1987 when the Dow fell nearly 23 per cent in a day.

Each one of these incidents disproves the theory that markets are efficient and predictable, and that they tend to some sort of rational equilibrium. They patently don't. They reflect human irrationality, messiness, greed and one-upmanship.

Of course, the most vivid and recent debunking of EMT was the financial crash of 2008. In its aftermath Alan Greenspan – arch-deregulator and proponent of Efficient Market Theory – appeared before a congressional committee, where the Chairman told it straight: "You found that your view of the world, your ideology, was not right, it was not working?" Greenspan agreed: "That's precisely the reason I was shocked because I'd been going for 40 years or so with considerable evidence that it was working exceptionally well."

In the lexicon of Efficient Market Theory there were no words for the 'black swan' event of 2008. Greenspan himself had expressed some concern in 1996 at the "irrational exuberance" of the housing market, but had suppressed his own perfectly sensible concerns because he believed that the market was following its own perfect logic. Mervyn King might have had fears about the housing market over-heating too, but had he pointed out that the Emperor was naked he would likely have been fobbed off with the line that the market knew what it was doing.

But as the queues outside Northern Rock and the multibillion pound bailouts proved, the market did not know what it was doing. Fannie and Freddie, Fred the Shred, runs on high street banks – at the root of all these landmark failures is the failed old philosophy of EMT, the idea that encouraged laissez faire regulation on a global scale. Why (EMT asks) should governments, with their dumb, lumbering, human logic, be able to shackle that wise and mystical thing called 'the market'? Why should they intervene and break the spell?

But the spell was broken, and the hand that did it was not government-driven but market-driven. It led George Soros to suggest that "rational choice theory has actually run into bankruptcy, very similar to the bankruptcy of the global financial system after Lehman brothers."

Adair Turner, former Chairman of the Financial Services Authority, declared that the crash represented "a fairly complete train wreck of a predominant theory of economics and finance.... A very fundamental shock to the 'efficient market hypothesis' which has been in the DNA of the FSA and of securities and banking regulators around the world."

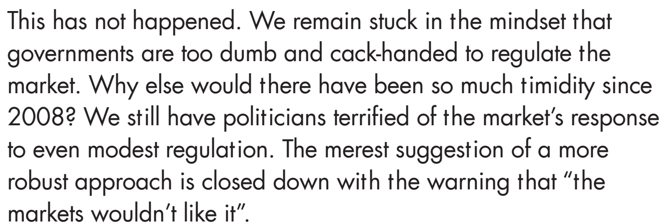
This should have been the moment that the prevailing paradigm was blown away. Dangerously for us all, it wasn't.

Robert Schiller is one of those rare economists with the gift of foresight, famed for predicting that the bubbles would burst before the dot com bust and the global crash. Now he fears that even "the bursting of the speculative bubbles that led to the 2007-09 world financial crisis [haven't] really sobered us up."

He is right. Yes, there were some minor regulatory changes. But the broad brush strokes in the bigger picture remain unchanged. The whole financial system got bailed out. Believers in Efficient Market Theory resurrected it all with a few fairly cosmetic amendments.

Here is what should have happened. Senior debt holders, equity holders and uninsured depositors should have lost a lot of money. Institutions should have been put into administration, emerging later on with new management and new capital structures. To anyone who understands capital markets, that is fair – and a fair spread of losses.

And most importantly, we should have seen major changes to regulation – not just "more" and "tougher" but a fundamental re-think of the relationship between regulation and finance.



This has not happened. We remain stuck in the mindset that governments are too dumb and cack-handed to regulate the market. Why else would there have been so much timidity since 2008? We still have politicians terrified of the market's response to even modest regulation. The merest suggestion of a more robust approach is closed down with the warning that "the markets wouldn't like it".

On a deep level, we are still struggling out of the straitjacket of economic consensus that has dictated the terms for over 40 years.

It wasn't always like this. There was a time when democratically elected governments felt they had a bigger role to play in taming and shaping financial markets to fit within a more balanced wider economy: the anti-trust laws that broke up Standard Oil at the beginning of the last century and AT&T towards its end; the 1930s forcing of J.P. Morgan to separate investment and commercial banking; Paul Volker's raising of interest rates in the 70s. All of these things could be accused of being 'against the market', but people were free to do such dramatic things before Efficient Market Theory took hold.

Of course, we don't want to go back to the stage where markets were barely allowed to operate. The past 20 years of globalisation have seen millions lifted out of poverty, in large part thanks to the dynamism of free markets. We don't want to throw the bouncing, prosperous baby out with the bathwater.

But we do have to challenge this idea that markets are all-seeing, all-knowing, always right – and that no authorities have the ability to do anything about them. We should reinstate free markets as being a fantastically valuable part of a modern economy – but part of it, not master of it.

Democratic politics should be more confident. Leaders should be more emboldened. If the Conservatives carry on with such an uncritical extension of Mrs Thatcher's legacy – unconsciously swallowing Efficient Market Theory – they may well run into trouble.

They should start by giving regulators a much more highly esteemed place in our economy. If regulation is to be feared and held accountable by financial institutions it needs to be a lot more serious, rigorous and respected. I see no reason why regulation should not be seen as a vocation. Done right, these jobs would be guarding our economy, jobs and savings against more catastrophic crashes – a role worthy of at least as much respect as police inspectors or hospital consultants.

It should not be seen as bureaucratic and dull but vital and highly complex.It should, as a profession, attract the brightest. For that to happen the whole brand of regulation in the UK needs a major boost – which is why I believe it should be returned to the Bank of England. Just as bright economics graduates long to work in the hallowed corridors of Her Majesty's Treasury – or the glittering citadels of the City – so they would wish to work at the regulatory arm of the Old Lady of Threadneedle Street, whose stardust will never be beaten by some anonymous office block emblazoned with the latest regulatory acronym. FSA, FCA, FPC, PRA… I say roll it all into the BoE.

The focus of regulation is entirely misdirected – all at capital adequacy and not investor protection. The whole system has been copied across from banks, where capital adequacy is the issue. Regulation deserves a lot more money, too. According to Robert Shiller, 0.001 per cent of the value of securities is spent on the regulation of securities. The cards are stacked vertiginously one way.

Most importantly, there needs to be a change of mindset. Economists, academics, modellers, gurus and geeks need to recognise that though a grand and beautifully simple theory applying across financial markets may be desirable, it is most likely impossible.

Seven years after the financial crash, we must wake up to the fact that orthodoxy equals complacency equals danger. Like a motorist unthinkingly following the satnav's directions into a flood, you can trust too much in the computer's formulations to pay attention to the warning lights flashing before your eyes. In other words, we must rediscover our gut instincts on when the market is behaving over-exuberantly, not just trusting it will right itself automatically or putting all our faith into those who have built a technocracy out of mathematical modelling.

You might think this odd coming from someone who makes their living on the financial markets. But I believe in free markets, not totally unfettered ones. Most of all I believe it is important not to mistake an interesting idea for the cast-iron truth, and build your entire economy around it. It is not in my or anyone else's interests to see another 2008.

J.M. Keynes once warned that many are "the slaves of some defunct economist". We must free ourselves of the shackles of this defunct economic theory – before, again, it is too late.