

I was bemused by a comment made during the course of the debate I took part in last night on modern monetary theory. A person made a comment, he said on behalf of central bankers. All I had said was, he suggested, nonsense, because all macroeconomics is based on microeconomics and that, in turn, is based on rational expectations theory and it works, so there was no debate to be had on modern monetary theory because it might suggest otherwise.

The participant seemed quite angry and demanded I respond in detail, which I did not. That is because I do not accept the premises of rational expectations theory, and not do I for one moment think that macro should be built on micro-foundations. If MMT is a good theory it is precisely because it is a genuine macro theory, and one of the rare few that considers money.

Let me address the issue that was raised though. If the Bank of England can use Investopedia to provide definitions on its website, so will I. They [say this of rational expectations theory](#):

## **What Is Rational Expectations Theory?**

The rational expectations theory is a concept and modeling technique that is used widely in [macroeconomics](#). **The theory posits that individuals base their decisions on three primary factors: their human rationality, the information available to them, and their past experiences.**

**The theory suggests that people's current expectations of the economy are, themselves, able to influence what the future state of the economy will become. This precept contrasts with the idea that government policy influences financial and economic decisions.**

And they add:

*The rational expectations theory is the dominant assumption model used in business cycles and finance as a cornerstone of the [efficient market hypothesis \(EMH\)](#).*

Economists often use the doctrine of rational expectations to explain anticipated **inflation** rates or any other economic state. For example, if past inflation rates were higher than expected, then people might consider this, along with other indicators, to mean that future inflation also might exceed expectations.

The actual theory of rational expectations was proposed by John F. Muth in his seminal paper, “Rational Expectations and the Theory of Price Movements,” published in 1961 in the journal, *Econometrica*. Muth used the term to describe numerous scenarios in which an outcome depends partly on what people expect will happen. The theory did not catch on until the 1970s with **Robert E. Lucas, Jr. and the neoclassical revolution in economics**.

As explanation they offered this:

*This doctrine is motivated by the thinking that led Abraham Lincoln to assert, “You can fool some of the people all of the time, and all of the people some of the time, but you cannot fool all of the people all of the time.”*

*From the perspective of rational expectations theory, Lincoln’s statement is on target: The theory does not deny that people often make forecasting errors, but it does suggest that errors will not recur persistently.*

*Because people make decisions based on the available information at hand combined with their past experiences, most of the time their decisions will be correct. If their decisions are correct, then the same expectations for the future will occur. If their decision was incorrect, then they will adjust their behavior based on the past mistake.*

This is a logic I cannot agree with. It is all too obvious that, firstly, people are not rational; second that people view data and experience through personal perspectives, and that some are attributed undue weighting in this process meaning that collective views are rarely collective; third, that people are not independent of each other when exercising judgement and that therefore crowds can be wrong and, fourth, that outside views, even when right, are routinely dismissed as irrational because they are not the norm. I am well aware that it is claimed that behavioural economics addresses these issues. In my opinion, polishing a theory that is wrong does not make it right. There is also ample evidence that this theory does not work. Adair Turner summarised that view best in his review of the 2008 financial crisis, published in 2009. **As he put it:** *The analysis of the causes of the financial crisis implies the need for major changes in our approach to capital, liquidity, accounting, and institutional coverage, which are addressed in Chapter 2. But the crisis also raises important questions about the intellectual assumptions on which previous regulatory approaches have largely been built.*

*At the core of these assumptions has been the theory of efficient and rational markets. Five propositions with implications for regulatory approach have followed:*

- \* Market prices are good indicators of rationally evaluated economic value.*
  - \* The development of securitised credit, since based on the creation of new and more liquid markets, has improved both allocative efficiency and financial stability.*
  - \* The risk characteristics of financial markets can be inferred from mathematical analysis, delivering robust quantitative measures of trading risk.*
  - \* Market discipline can be used as an effective tool in constraining harmful risk taking.*
  - \* (v) Financial innovation can be assumed to be beneficial since market competition would winnow out any innovations which did not deliver value added.*
- Each of these assumptions is now subject to extensive challenge on both theoretical and empirical grounds, with potential implications for the appropriate design of regulation and for the role of regulatory authorities.*

*And as he added:*

*In the face of the worst financial crisis for a century, however, the assumptions of efficient market theory have been subject to increasingly effective criticism, drawing on both theoretical and empirical arguments. These criticisms include that:*

- Market efficiency does not imply market rationality. There is nothing in empirical tests of market efficiency narrowly defined (i.e. tests of the non-existence of chartist patterns) which illustrates market rationality. The fact that prices move as random walks and cannot be predicted from prior movements in no way denies the possibility of self-reinforcing herd effects and of prices overshooting rational equilibrium levels.<sup>12</sup>*
- Individual rationality does not ensure collective rationality. There are good theoretical and mathematically modellable reasons for believing that, even if individuals are rationally self interested, their actions can, if determined in conditions of imperfect information and/or determined by particular relationships between end investors and their asset manager agents, result in market price movements characterised by self-reinforcing momentum.*
- Individual behaviour is not entirely rational. There are moreover insights from behavioural economics, cognitive psychology and neuroscience, which reveal that people often do not make decisions in the rational front of brain way assumed in neoclassical economics, but make decisions which are rooted in the instinctive part of the brain, and which at the collective level are bound to produce herd effects and thus irrational momentum swings.<sup>15</sup>*
- Allocative efficiency benefits have limits. Beyond a certain degree of liquidity and market completion, the additional allocative efficiency benefits of further liquidity and market completion may be relatively slight, and therefore easily outweighed by additional instability risks which increasing liquidity or complexity might itself create. It*

*is for instance arguable that the allocative efficiency benefits of the creation of markets for many complex structured credit securities (e.g. CDO-squareds) would have been at most trivial even if they had not played a role in creating financial instability.*

*- Empirical evidence illustrates large scale herd effects and market overshoots. Economists such as Robert Shiller have argued persuasively that empirical evidence proves that financial market prices can diverge substantially and for long periods of time from estimated economic values, with the calculated divergences at times so large that policymakers can reasonably conclude that market prices have become irrational.<sup>16</sup>*

*Given this theory and evidence, a reasonable judgement is that policymakers have to recognise that all liquid traded markets are capable of acting irrationally, and can be susceptible to self- reinforcing herd and momentum effects.*

Precisely. In other words, even if individuals are rational and have reasonable expectations as a result this does not form the basis for regulating financial markets, which are relatively predictable given their limited goals, and much less so macroeconomies.

So, why use such a flawed basis for macroeconomics? I was justified, I think, in my dismissiveness. We need a better basis for macro. I suggest MMT is a major contributor to that. I would also suggest the commentator has not learned the lessons of history. But there is no news there.