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Erronomics – why mainstream economics will always be a dangerously ideological pseudo-science & what can be done about it with some suggestions for a better, more scientific model

David Wells asserts the moral right to be identified as the author of *Erronomics* and this pamphlet based on it.

Erronomics is a pre-book (by an analogy with academic pre-papers) of 214 pp. It is described on the cover as an **author's sketch** because it is a record of work-in-progress. The most important arguments are laid out in detail; the less important are just sketched. It is based on the books, *Power and Economics: the Failure of Ideology*, [Wells 2001]; *The End of Civilisation: Science, Ideology and Irrationality*, [Wells 2003], both published by Rain Press, but develops their concepts much further and in new directions.

Mainstream orthodox economic [MOE] ideology

The claim of mainstream orthodox economics [MOE] to have no ideology is in itself ideological. On the historical evidence that MOE is ideological and that its ideology is liberal *laissez faire*, based on these ideological themes and theses:

- A. Economics can and must be separated from politics.
- B. Economics can and must be based on mathematics.
- C. By relying only on mathematics, power is either excluded, or admitted only in a form which can be calculated.
- D. MOE claims to be positive not normative, thus excluding morality and power.
- E. Economic Man is an atomic self-interested individual.
- F. Individual rationality is based only on utility maximisation.
- G. The ideal economic state is one of equilibrium.
- H. The MOE definition of economics as the 'allocation of scarce resources'.

Scientific method

In order to support this ideology while avoiding the appearance of being ideological, MOE has to have a defective scientific method. According to a typical definition, any sound scientific model incorporates all the essential features of the situation, while it deletes all the inessential. This leaves open the question: what is essential and what is inessential? The MOE response is to omit important features whose incorporation would undermine their ideology, while incorporating features that support it.

These include: using over-simplified and over-abstract models; failing to distinguish between theories and simulations (as illustrated by Friedman's claim that the truth of a model's assumptions does not matter); making models mathematically too simple, so they are more *tractable* but less realistic; (a special but widespread example is the use of simple, unrealistic static models rather than more realistic dynamic models); playing down side-effects; and emphasising the effects on aggregates rather than on the individuals involved. The last two practices both involve normative judgements, and hence illustrate how MOE is normative, even when it claims to be positive.

A history of increasing ideology: with a timeline

The ideology of MOE did not spring fully-formed from the earth, but has developed over two centuries, becoming more ideological with time. Thus, Adam Smith was not strongly ideological, his *laissez faire* claims being balanced by contrary claims, (the 'Adam Smith problem'); the 'marginal revolution' moved towards greater ideological content; Pareto's criterion was another ideological step, as was the increased use of mathematics in economics after WW2; and so on.

There have been moves away from ideology – some aspects of Marshall, the works of Keynes and Joan Robinson, for example – but these have failed so far to stop the forward march of ideology, recently exemplified by rational expectations theory, the efficient market hypothesis, and the 'representative agent' in macroeconomics. The recent work on behavioural economics has started to undermine several ideological MOE assumptions and will, we must hope, have a substantial long-term effect.

The book includes an ideological timeline, examining the work of notable economists from Adam Smith and Ricardo onwards, to document the historical development of MOE ideology and its effects on MOE theory.

Themes

DMU and ITU

The theme of *decreasing (diminishing) marginal utility* [DMU] is crucial in MOE. It is closely related to ideological themes B, C, F and G and is naturally associated with ideas of equilibrium, negative feedback, continuity and absence of conflict. However, there is a 'dual' concept, labelled here, *increasing threshold utility* [ITU] which in my submission is equally important but which has been omitted from MOE because it is linked to disequilibrium, positive feedback, discontinuity and potential conflict.

In an ITU event, the demands on an economic agent suddenly increase greatly, and so push them towards a metaphorical cliff. Action becomes imperative but is costly, maybe exceptionally costly. The agent loses power, and control of the situation, and so may be easily exploited. If the threshold is passed, assets are lost, by the agent and maybe others; the agent cannot return to the former state past the

discontinuity; and if many agents experience ITU events, political power is required to handle the situation which can no longer be regarded as purely economic.

An example would be a man who has a loan of £10,000 which is suddenly called in. He has difficulty in raising the money, and so approaches a dangerous threshold; if he fails to repay the loan, he may become bankrupt, or his business may fail, and so workers lose their jobs – all examples of disequilibrium and discontinuity.

Unemployment is a serious event in any economy and one that MOE is least able to handle well because it lacks any concept of ITU, discontinuity, etc. Closely related is ‘creative destruction’, linked to ITU and volatility, and also badly handled by MOE.

ITU thresholds occur everywhere in the real economy, closely linked to volatility, and economic agents who do cross them (unemployment is just an example) suffer from discontinuities, loss of power, and loss of assets (often leading to poverty) with grave social and political consequences thereby forcing political factors – and also moral factors – back into economics.

Perfect competition and volatility

The concept of ‘perfect competition’ fits ideological themes B, C and G especially C. Ironically, however, it can be interpreted as neither competitive (because the agents do nothing to compete *actively* with other agents) nor ‘perfect’ since the more closely markets are to this ‘perfection’, (for example, commodities and farmers’ produce) the more volatile they are. This volatility is costly to everyone involved, not least because it increases the costs of rational planning, and the chances of ITU events occurring.

It can be and is handled in practice by the use of ancillary markets (for futures and derivatives) or by government intervention – creating the irony that so-called ‘perfect markets’ are so imperfect that they require additional markets or government action – against the *laissez faire* ideological imperative – to handle their failures.

Shops, middleman, supply chains: storage and non-clearing markets

Standard MOE theory links prices to supply and demand via the concept of clearing markets. In a market which clears at time t , aggregate supply and demand curves determine the clearing price, at that time t . This leads to the objection that supply and demand and price cannot, logically, be determined at the same time: this model therefore must be an oversimplification (and an example of mathematical tractability purchased at the cost of serious loss of scientific realism).

However, putting that objection on one side, most goods are not brought to a market where they are cleared at a particular time, but rather enter a supply

chain, possibly pass through the hands of one or more middlemen (who are neither producers nor consumers) before being stored – for example, on the shelves of a shop – before they are finally purchased at some future time t^* .

Only some goods are sold in a market which clears at a particular time – and all such markets are liable to costly volatility, as we have noted. Hence the irony that shops, perhaps the most widespread and universal, both historically and geographically, of all economic institutions, do not feature in MOE textbooks or MOE theory.

The phenomenon of supply chains, middleman and shops illustrate how most goods are not sold in clearing-markets, and their markets never do *statically* clear: goods, rather, enter a supply chain and there is a *dynamic* balance as they move down the chain until eventually (usually, not always) they are sold.

Storage must be a profoundly important phenomenon in any scientific economics, but it is generally absent from MOE because the possibility of storage undermines all MOE's most basic market models and ideological assumptions.

Storage and the time delays that it allows, allow sellers to wait for a 'right' customer; for buyers to, in effect, search geographically at little cost; gives a degree of power to the seller (allowing the shopkeeper a role in pricing, for example); and it promotes *real* competition. Storage also reduces the volatility of prices, allowing both sellers and buyers to *plan more rationally* and therefore more effectively, and so on.

General Equilibrium Theory [GET]

General Equilibrium Theory, like the concept of perfect competition to which it is so closely related, supports ideological themes B, C and G. However, since perfectly competitive markets are so hard to find in actual economies, it is highly irrational and unscientific to construct a general theory in which *every* market is taken as 'perfect'.

Moreover, because perfectly competitive markets are so volatile, the same volatility will appear in GET models, and has in fact been identified (for example, by Debreu). Therefore, while *static* equilibria may exist for certain GET models, (under numerous very restrictive and unrealistic conditions) *dynamic* GET models will display volatile behaviour that undermines any reasonable dynamic interpretation of 'equilibrium'.

In turn, volatility in dynamic GET models will generate ITU phenomena, leading to disequilibrium and discontinuity and *undermining the original ideological basis* for constructing GET theory. I conclude that GET falls to an ITU *reductio ad absurdum*.

Volatility, storage and uncertainty

MOE is almost entirely concerned with probabilistic risk, not with Knightian-Keynsian uncertainty. This perfectly suits MOE ideological insistence that economics must be mathematical and apolitical: risk can be calculated via probability, uncertainty cannot be so calculated, and the latter fact – compare ITU phenomena – forces politics back into economics whenever uncertainty is acknowledged. Volatility is costly at best and at worst generates ITU phenomena which are even more damaging and costly. Both aspects, the cost and the ITU threat are linked to the uncertainty volatility creates.

Storage is a major defence against volatility and ITU. (An example: wealth as a type of storage and a defence against both.) The existence of storage, and its ubiquity, undermines ideological MOE models of clearing markets, price formation, etc.

Stock markets

The efficient market hypothesis [EMH] is implicitly, sometimes explicitly, supported by the fact that stock markets are *approximately* random. This argument is false and amounts to the basic logical error, the belief that, 'If X implies Y, and Y, then X.'

If players on the stock market behave very rationally, it will go on a random walk, but it will also do so if they behave totally irrationally and if they behave in a combination of rational and irrational. Therefore, the 'roughly' random movement of stocks proves nothing. To determine what is really happening, actual investors must be examined. The conclusion is that players are often irrational, not least since in trying rationally to gain information they will link to other agents and create positive feedback effects.

Likewise, the rational expectations model is contrary to facts. Both this and the EMH hypotheses support several of the MOE ideological imperatives, without having any scientific virtue – as does Friedman's claim that speculation must be stabilising. On the contrary, it can be rational for a sufficiently wealthy player to follow an 'observed' trend towards values that he judges to be extreme.

International trade, side-effects and individuals

Ricardo's original Comparative Advantage argument is totally static and ignores any dynamic factors. It is closely related to all the MOE ideological themes A to F.

Taking the Friedman analogy of the lawyer who can type letters & his secretary who knows some law, we may say that Friedman's own conclusion that the lawyer should stick to the law (etc.) ignores the future career paths of both economic agents. In a realistic, scientific and dynamic perspective Ricardo's original CA conclusion is about maximising production when all other factors are ignored. In practice, those factors – especially the personal states, present and future, of the economic agents involved – will inevitably introduce social, political

and moral aspects & may well dominate the Ricardian conclusion, and also the more ‘sophisticated’ conclusions drawn from it.

Double markets, labour and wages

In standard MOE textbook models of employment, the employer takes on workers, taking into account the phenomenon of diminishing marginal productivity of labour [DMPL] until the employer cannot benefit by taking on one extra worker. This fits all ideological factors from A to F, but is also unrealistic because it ignores the technical constraints almost invariably present. Thus, a new factory requires 24 machinists, so the firm employs 24 machinists, no more and no less.

It is also unrealistic because it assumes that employees work for wages doing work which can be quantified. So it is not a theory of the salaries paid to higher-level staff and it says nothing about the remuneration of top-level executives, for example.

Finally, it is unrealistic because workers have minds of their own. There are double markets for labour, therefore: as the firm is choosing which workers to offer work to, the workers are, if they are not in an ITU situation, choosing which firm to work for. The labour market is therefore very far from being perfect, with the same qualification that ITU is absent: sufficiently needy workers may indeed be price takers.

Notice that while the phenomenon of the backward-bending supply curve for labour is recognised – as wages rise, so less work may be offered – the phenomenon of the *forward-bending supply curve* is not: as prices drop, yet more and more work may be offered to meet a subsistence standard of living – subsistence being a continuous ITU state in which the individual and his family are always close to destitution.

The basic MOE model of employment is important because it supports so very many ideological claims, in particular the idea that employment and unemployment, in so far as they exist at all, are logically unrelated to any moral, social or political factors, and so remuneration cannot have any moral dimension.

Poverty, welfare, volatility and ITU

Volatility and ITU events are a major creator of poverty and wealth. In MOE theory, unemployment is a passing temporary state, and poverty is not important. This lack of focus on two grave problems is forced by the ideological factors listed earlier.

Real world welfare systems implicitly recognise that the phenomenon of ITU is real and they accept, also implicitly, that money does have a decreasing marginal utility in many circumstances. Ironically the so-called ‘welfare’ theorems bring politics and economics together again: it is markets closest to ‘perfect competition’ that generate the volatility which is one major cause of the need for welfare provision. Welfare pay, especially unemployment benefits, can be

interpreted as protection against volatility which is too great for individual economic agents to handle.

The Pareto criterion and the subsequent ‘welfare’ and ‘compensation’ theorems also ignore the vast costs of compensation; the bureaucracies required to implement the compensation; the senses of justice and ‘fairness’ that behavioural economists have identified as recognised everywhere; the political power – plausibly that of a powerful dictator – required to force the implementation of compensation; and the long-lasting political turmoil likely to follow; and so on. They are, in other words, totally unrealistic and unscientific, a product of ideological imperatives out of touch with the real world.

Provisional conclusions

- The positive ideological assumptions of MOE are all falsified by experience and the existence of ITU phenomena, plus volatility, storage, supply chains and middlemen.
- Economics cannot be focused only on equilibrium but must take disequilibrium and positive feedback, discontinuities and potential conflict into account, including ITU.
- Economics cannot be separated from politics. Economics cannot be based only on mathematics but must also involve qualitative judgements. (MO economic theory is already normative: for example, via its focus on aggregates not individuals, and its tendency to ignore almost all side-effects, a limited number of externalities apart.)
- The theme of ‘power’ cannot be excluded from a scientific economics.

Copies of *Errornomics* may be ordered from the following address: 27 Cedar Lodge, Exeter Road, London NW2 3UL, United Kingdom
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