

Referee report on “The Economics of Radical Uncertainty”

The dominant economic model of rational choice under certainty (with a limited number of choices so that decision-making is computationally possible) clearly does not fit the real world of outcome uncertainty (since the outcomes of our actions depends on the actions of others that we cannot predict with certainty) and an overwhelming number of choices. This paper contributes to the discussion of the need for an alternative model of choice, and indicates that evolutionary logic implies that a small amount of innovation combined with a large amount of replicating the behavior of others fits actual as opposed to hypothetical competitive outcomes.

I recommend publication with a few minor edits and additional references.

Minor edits

The statement:

“If rationality is defined as maximizing utility subject to constraints, but every possible good is effectively identical, then every good will be in the argmax of the utility function, and therefore every good will be chosen with equal probability”

would be better put as:

“If rationality is defined as maximizing utility subject to constraints, but every possible good is effectively *indistinguishable in terms of the computability of its impact upon consumer utility*, then every good will be in the argmax of the utility function, and therefore every good will be chosen with equal probability”

The author sensibly bases his literature survey on Alchain, whose mainstream credentials are impeccable. However while this is politically judicious, given the mainstream attitude to non-mainstream thinkers, it yields a false perspective on the history of economic thought. This could be remedied in the section on page 7 where the following is stated:

Simon’s model is a good heuristic for imitative behaviour. Agents essentially choose with a probability equal to the number of times any given alternative has been selected as a proportion of the total number of selections made across the agents to which the agent is connected. They may, for example, regard other agents as having more information than they do, and hence copy their behaviour.

This proposition was stated much earlier than Simon or Alchain by ... Keynes (emphasis added below):

(3) Knowing that our own individual judgment is worthless, we endeavor to fall back on the judgment of the rest of the world which is perhaps better informed. That is, we endeavor to conform with the behavior of the majority or the average. *The psychology of a society of individuals each of whom is endeavoring to copy the others leads to what we may strictly term a conventional judgment.* (Keynes 1937p. 214)

p. 13. The discussion of why “The sentiment of any given firm depends on its sentiment in the previous period and negatively upon the overall rate of growth of output in the previous period” needs some work. I would suggest that Goodwin’s trade cycle model provides some backing here (Goodwin 1967). Though the Goodwin model has been criticized empirically (wrongly in my view, but that’s another topic), it can be reduced to two definitionally true dynamic identities:

- The employment rate will rise if economic growth exceeds the sum of population growth and growth in labor productivity; and
- The wages share of output will rise if wage demands exceed growth in labor productivity;

These two factors imply that—at least in some stages of the trade cycle—economic growth reduces profits, as the growth causes increases in wage costs that reduce aggregate profit. This provides a rationale for the negative sign used in this model.

Lastly, Keen (Keen 2013) is cited in the paper but not in the bibliography.

Goodwin, Richard M.

1967 A growth cycle. *In* Socialism, Capitalism and Economic Growth. C.H. Feinstein, ed. Pp. 54-58. Cambridge: Cambridge University Press.

Keen, Steve

2013 A monetary Minsky model of the Great Moderation and the Great Recession. *Journal of Economic Behavior & Organization* 86(0):221-235.

Keynes, J. M.

1937 The General Theory of Employment. *The Quarterly Journal of Economics* 51(2):209-223.