Economic Calculation and Bayesian Entrepreneurship

Erin Beckman Tyler J. Brough Marc R. Dotson

2025-05-30

We will now proceed to entangle the entire area!

The Austrians have played an important role in keeping a set of ideas alive in the face of a sometimes hostile mainstream. Any progress forward, however, need not, indeed should not, be a further continuance of an isolated "Austrian" economics…. In fact, it seems indisputable that scientific understanding would be much improved if at some point in the future we could genuinely and intelligently say, along with Milton Friedman, there is no such thing as Austrian economics, only good economics and bad economics. But this time we would mean that good economics was an economics not only of preferences and constraints, but also an economics of time and ignorance. – Vaughn (1994)

Model development is inherently a task of learning under conditions of unstructured uncertainty.

[T]he ultimate success of these endeavors depends strongly on creativity, insight, and skill in the process of model creation. As the model builder entertains new ideas, casting off those that are not deemed promising and developing further those that are, he or she is engaged in a sophisticated process of learning. – Geweke (2010)

Entrepreneurial talent may not be readily amenable to analysis by tools of modern decision theory. If this be the case, the direction of emphasis should be clear. We should drop attempts to apply irrelevant theory rather than to force incompatible material into a received analytical orthodoxy. It may or may not be possible to "model" entrepreneurial choice in a manner that is aesthetically satisfying to the formal theorist. But any modelling that leaves no room for the creative and imaginative elements in such choice lends confusion rather than enlightment to our understanding of the well-springs of economic progress. – Buchanan and Di Pierro (1980)

Naturally, then, science, understood as the discoverer of absolute truths, remains ***idle*** *for lack of absolute truths. But this doesn't lead to the destruction of science; it only leads to a different conception of science. Nor does it lead to a "devaluation of science": there is no common unit of measurement for such disparate conceptions. Once the cold marble idol has fallen in pieces, the idol of perfect, eternal and universal science that we can only keep trying to know better, we see in its place, beside us, a living creature, the science which our thought freely creates. A living creature: flesh of our flesh, fruit of our torment, companion in our struggle and guide to the conquest.* – de Finetti (1989)

Introduction

1. Reconstructing Pirrong's rational Bayesian.
2. Neo-classical misunderstanding of MGRM
3. Economic calculation (Misesian microfoundations)
4. De Finetti's operational subjective probability
5. Bayesian entrepreneurship with Bayesian workflow.
6. MGRM's hedging revisited!

Reconstrucing Pirrong's Rational Bayesian

In this section we will reconstruct Pirrong's "rational" Bayesian.

The Neo-Classical Misunderstanding of MGMR's Hedging

Why did neoclassical financial economists so badly misunderstanding MGRM's hedging strategy? Because they do not understand "disequilibrium" behavior.

- Basic "is" and "ought" confusion

Misesian Economic Calculation

Core to catallactic theory is the concept of economic calculation via money prices.

De Finetti's Operational Subjective Probability

Bruno de Finetti is the forgotten Austrian!

Bayesian Entrepreneurship with Bayesian Workflow

Mises provides the microfoundations and in turn, de Finetti operationalizes the entrepreneur!

MGRM Revisited

We are now ready to revisit MGRM's hedging strategy as an entrepreneurial (read arbitrage) strategy of commodity marketing.

Conclusion

We conclude ...

References

Buchanan, James M., and Alberto Di Pierro. 1980. "Cognition, Choice, and Entrepreneurship." *Southern Economic Journal* 46 (3): 693–701.

de Finetti, Bruno. 1989. "Probabilism: A Critical Essay on the Theory of Probability and on the Value of Science." *Erkenntnis* 31 (2–3): 169–223.

Geweke, John. 2010. *Complete and Incomplete Econometric Models*. Princeton University Press.

Vaughn, Karen I. 1994. *Austrian Economics in America: The Migration of a Tradition*. Cambridge University Press.