

More Methodology, Less Metaphysics: A Response to Hoover's Argument Against Microfoundations

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INTRODUCTION

Microfoundations

- Microeconomic equilibrium theory (MET) shapes the theoretical enterprise in economics.
- Economic models need to derive all their conclusions from the choice patterns of individual economic agents.
- Generalizations about choice or other economic phenomena are *ad hoc* if they are not derivable from (MET)—e.g., Keynes (1936) claim that the marginal propensity to consume is less than one.

Why Microfoundations?

- Methodological individualism (Lukes, 1970).
Macroeconomic models need microfoundations as social phenomena need to be derived from individuals' actions because: Ontological Individualism (OI), the latter are ontological basic; Explanatory Individualism (EI), the latter best explains the former.

PROBLEMS

- Ontological Individualism
- In recent publications economists and philosophers pointed out that a purely individualistic micro-ontology is unable to do justice to all economic phenomena.
- These arguments against microfoundations depend on the ontological status of microeconomic/macroeconomic entities (read Epstein, 2014, 2015; Hoover, 2001, 2006, 2008, 2015).
- Ontological-based arguments do not settle the questions regarding microfoundations.
 - *In this paper, I focus on Hoover's argument*

HOOVER'S ARGUMENT

Hoover argues that commitment to OI in economics is not accurate, and that is why a compelling methodological account of non-microfounded macroeconomics is possible.

- ❖ Structural Causal Analysis
→ BUT

Hoover's methodological account relies on realist accounts of causation and macroeconomic entities.

1. "Causes are real properties of variables in structures" (Hoover, 2001).
 - ▶ Money flows, alter expenditure
- BUT

If macroeconomic entities turn out to be just the sum of their microeconomic parts, macroeconomic entities' causal efficacy is determined by microeconomic parts.

2. Hoover needs to show, first, that macroeconomic entities are not merely aggregations of microvariables—i.e., they exist externally and objectively.

HOOVER'S ONTOLOGICAL DISTINCTION

Natural Aggregates

- ❖ Just simple sums or averages, which are measured in the same units as the individual components that constituted them (share the same dimensionality).

National Interest Rate

Synthetic aggregates

- ❖ Fabricated out of components, whose structure is altered. These do not share the same dimensionality with the other components.
- ❖ *Natural Rate of Unemployment* determinants include facts about expected future of the economy, changes in labor force, technological progress, changes in labor market institutions, wage settings, and changes in government policies (Krugman & Wells, 2009).

OBJECTION

1. The distinction presents problems that makes Hoover's methodological account to fall short.
2. Deriving microfoundations to natural aggregates is plausible—and epistemically justified.
 - Theoretical coherence/ internal consistency (Wren-Lewis, 2007, 2011, 2018)
3. The distinction is unlikely to establish an ontological distinction.

"Indeed, *I argue*, this distinction speaks more to differences in the ease with which a macroeconomic variable can be measured instead"

4. So, if there is no ontological distinction (nothing that makes synthetic aggregates ontologically independent from microeconomic parts), Hoover's methodological account cannot get off the ground.

MEASUREMENT PROBLEM

Natural Rate of Unemployment is said to be the variable that describes the level of unemployment that would exist when the labor market is said to be in equilibrium.

How can we model (measure) NRU?

1. Determine the wage/price level that balances supply and demand for labor—but doing this is difficult (McAdam & Morrow, 1999; Reiss, 2001).
 - ▶ Not a point about the ontological constitution of unemployment rate.
 - ▶ Has to do more with economists' purposes and abilities that matches what they want to *use* it for.
2. Measuring unemployment by adding the number of working aged people failing to get a job.

So, the unemployment rate could be treated as *either* a natural or synthetic aggregate.

PROPOSAL

- I want to suggest that the debate about microfoundations should stray from ontological considerations and instead start from the fact that macroeconomic models are built for specific purposes (either practical or theory development purposes).
- Macroeconomists have the option to keep using their benchmark models (Aggregate Supply-Aggregate Demand, Dynamic Stochastic General Equilibrium, endogenous growth model, etc.) or substitute the model for another (Rodrick, 2015).
 - ▶ Depending on the purpose of the model, it is possible that some macroeconomic models would be best without microfoundations, or *vice versa*.
- An example is Dani Rodrick's model choice approach in economics, which accepts (and promotes) model diversity in economics as an epistemic virtue (see also Emrah Aydinonat, 2018).
- Note that embracing moral diversity it is not say that everything goes, it is important to establish what constitutes an adequate choice process (Grunr-Yanoff and Marchonni, 2018; Kuorikoski and Lehtinen, 2018).
 - ▶ Model Selection Theory (Hitchcock & Sober, 2004; Ruiz & Schulz, forthcoming).

CONCLUSION

1. Ontological-based arguments against microfoundations do not help to solve issues
2. The question of the need for microfoundations changes when it is considered from a methodological point of view
3. The need or absence of microfoundations, methodologically speaking, depends on concerns such as predictions, empirical relevance, explanation, data fitness, policy goals, etc.