

HETEROGENEITY IN MACROECONOMICS AND THE MINIMAL ECONOMETRIC INTERPRETATION FOR MODEL COMPARISON

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Abstract

I formally compare the fit of various versions of the incomplete markets model with aggregate uncertainty relying on the Minimal Econometric Interpretation, which is a computationally tractable Bayesian empirical framework. The models differ in the degree of household heterogeneity, with a focus on the role of preferences. For every specification, empirically motivated priors for the parameters are postulated to obtain the models' predictive distributions, which are interpreted as being distributions of population moments. These are in turn compared to the posterior distributions of the same moments obtained from an a-theoretical Bayesian econometric model. I show that aggregate data on consumption and income contain valuable information to determine which models are more likely to have generated the data. The two models featuring risk aversion heterogeneity have the highest marginal likelihoods, showing that this element is quantitatively important also for the study of aggregate outcomes. I also extend the framework to include the fit of the wealth Gini index, but the ranking of the models is only marginally affected.

Keywords: Heterogeneous Agents, Incomplete Markets, Unemployment Risk, Business Cycles, Bayesian Methods, Calibration, Minimal Econometric Interpretation, Model Comparison.

JEL Classifications: C63, C68, E21, E32, D52, D58.

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