Dissertation Preproposal:

Heterogeneous Rates of Return and the Distribution of Wealth

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Inequality in the distribution of wealth is a notable topic of interest both in the mainstream and in the economics literature. Realiable measurements of the wealth holdings of households, obtained either through surveys or through the use of capitalization methods on administrative tax data, suggest that the wealth distribution is both highly skewed and exhibit heavy (Pareto) upper tails. Benhabib and Bisin (2018) provide an excellent survey on both historical thought and theoretical explanations for stationary distributions of wealth with substantial skewness and heavy tails. Not surprisingly, the key arguments posited there also make their way into the standard consumption-saving problems which are a cornerstone of models prevalent in the heterogeneous agent (HA) macroeconomics literature. At the same time, recent evidence of heterogeneity in the rate of return for individuals provide motivation for an analogous assumption in the HA framework where a stationary, model distribution of wealth exists. In this way, one can test the theory regarding a meaningful relationship between stochastic returns and wealth inequality within a standard macroeconomic setting, where the direct effect of the returns to savings on the wealth accumulation process can be understood through its effect on the optimal behavior of households. A uniform distribution of the rate of return across households is estimated such that empirical moments of wealth (net worth) measured in the 2004 survey of consumer finances SCF are matched particularly well. In an effort to compare the structurally estimated distribution of returns from the model to the empirical distribution measured by Fagereng, Guiso, Malacrino, and Pistaferri (2020), a lognormal distribution across households is assumed. Not only does the lognormal assumption allow for the simulated moments to better fit the empirical moments for net worth, but the estimated distribution of returns is closer to its empirical counterpart as well.

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