

Author Report on MS 2012615: Asset pricing and wealth distribution with heterogeneous investment returns

This paper solves analytically for the equilibrium of an incomplete-markets heterogeneous-agent dynamic stochastic model. It also presents the implications of the model for asset prices and for the wealth distribution. Unfortunately, it does not appear that the paper makes a strong enough theoretical contribution, given the current state of the literature.

First, in terms of the model framework, the paper is very close to Angeletos (2007), simply allowing for an arbitrary number of investment projects. However, the framework in Angeletos is very easy to generalize in the case of multiple investment projects with linear stochastic technologies. The only difference will be that the total amount of exogenous investment risk will then be a weighted average of the riskiness of the different projects. The present paper is also very similar to Krebs (2006), though it allows for weaker conditions, thereby again generalizing the results. However, it is not clear that the directions in which the results are generalized are extremely important or extremely difficult mathematically or provide additional novel insights. Hence, in this respect, the paper does not appear to make a substantial enough theoretical or methodological contribution.

Second, in terms of implications for asset prices, equation (4.6) of this paper is essentially identical to equations (6) and (7) from Brown and Gibbons (1985). The differences from the current paper are not really outlined, so it is hard to see if we learnt something new here. There is also a great number of incomplete-markets papers that attempt to estimate the implications of agent heterogeneity for asset prices. One example is Garleanu and Panageas (2007), which examines how well the proposed model can address some well-known finance and asset-pricing puzzles. The current paper does not attempt exercises along these lines. This might be a better avenue for the author to explore: In other words, examining the quantitative performance of the model might be a more fruitful project, given that the theoretical results are not really novel to the present paper.

Third, a number of papers examine the implications of models with idiosyncratic investment risk for the wealth distribution and find that this distribution is characterized by (double) power laws. Some examples include Benhabib and Bisin (2006), Benhabib and Zhu (2008), Benhabib, Bisin and Zhu (2011a, 2011b), and Zhu (2009). Hence, the double power law finding of the current paper is not novel to the literature, especially in the very setup this model is using. Wang (2007) also explicitly solves an equilibrium model for the distribution of wealth and income in an incomplete-markets economy. These are all papers that should be included in the author's literature review and comparisons, so as to clarify the contribution of the current paper.

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