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Dear Alexix:

Thank you for submitting MS# 16742 "An Impossibility Theorem for Wealth in Heterogeneous-agent Models with Limited Heterogeneity" joint with John Stachurski to *Econometrica*.

I am sorry to report that, after reading your manuscript, we have come to the conclusion that we will be unable to publish it. Let me add that this very rapid decision does not imply a more severe criticism than an ordinary rejection after three or four months. Moreover, the fact that we are not providing detailed reports does not mean that we did not consider the paper seriously.

It simply indicates that the paper was read personally by a member of our editorial board, rather than by outside referees, who was able to consider the paper and reach a decision soon after the paper arrived.

In a nutshell, it has become widely understood, both theoretically and empirically, that in the standard Aiyagari model with stochastic earnings the tail of wealth and earnings will coincide. In their JEL article (section 3.1.1), Benhabib and Bisin do not assume your equation (1.1) holds with equality. They have an inequality (because of the term $\chi_t > 0$) and discuss its microfoundations. In other earlier papers they also have the accumulation equation with $\chi_t > 0$ microfounded, e.g. their ECMA (2011) and AER (Benhabib-Bisin-Luo, forthcoming).

Their proofs follow directly from now standard theorem of Kesten and Grey, and for the Aiyagari model which is only asymptotically linear in its consumption function with CRRA preferences, from generalizations of the Kesten theorems by Mirek, cited for example in the JET article. Tail results are asymptotic, so asymptotic linearity is enough to get the results.

Your result in section 4.2 is also known. Heterogeneity in discount factors (without randomness) has been used by Carroll et al. (QE, 2014) to get the tail of wealth fatter than that of income, as the patient agents accumulate faster, and they also had to introduce Poisson death rates to prevent the distribution from exploding. It is also well known that birth and death models can produce Pareto tails, with homogeneous or heterogeneous discounting. There are many such early (e.g., Wold and Whittle) and more recent models of this kind in the literature.

Overall, yours is an elegant paper but there is not enough novelty, I am afraid, to clear the high bar for this journal. Your proofs are new and there is value in having alternative proofs, given the importance of the topic in economics. A journal specialized in theory or in macroeconomics should be interested in publishing these new proofs.

Again, I am sorry to convey the bad news. I thank you for giving us the opportunity to consider your work and wish you luck in finding an alternate outlet for your paper.

Sincerely,

Gianluca Violante

Co-Editor, *Econometrica*