

WEALTH DISTRIBUTION: TO BE OR NOT TO BE A GAMMA?

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ABSTRACT : We review some aspects, especially those we can tackle analytically, of a minimal model of closed economy analogous to the kinetic theory model of ideal gases where the agents exchange wealth amongst themselves such that the total wealth is conserved, and each individual agent saves a fraction ($0 \leq l \leq 1$) of wealth before transaction. We are interested in the special case where the fraction l is constant for all the agents (global saving propensity) in the system. We show by moment calculations that the resulting wealth distribution cannot be the Gamma distribution that was conjectured in Phys. Rev. E 70, 016104 (2004). We also derive an upper-bound form for the distribution at low wealth, which is a new result.