Quantitative description of realistic wealth distributions by kinetic trading models

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Data on wealth distributions in trading markets show a power law behavior x- (1+?) at the high end, where, in general, ? is greater than 1 (Pareto's law). Models based on kinetic theory, where a set of interacting agents trade money, yield power law tails if agents are assigned a saving propensity. In this paper we are solving the inverse problem, that is, in finding the saving propensity distribution which yields a given wealth distribution for all wealth ranges. This is done explicitly for two recently published and comprehensive wealth datasets. © 2008 The American Physical Society.