

Economic effects of trading uncertainties

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We study a kinetic model for wealth distribution in a market economy in which the trading propensity of the agents is uncertain. Our approach is based on kinetic models for collective phenomena and, at variance with classical kinetic theory of rarefied gases, has to face the lack of fundamental principles that are replaced by empirical social forces of which we have at most statistical information. The proposed kinetic description allows to recover emergent wealth distribution profiles, that are described by the steady states of a Fokker-Planck type equation with uncertain parameters. A statistical study of the stationary profiles of the Fokker-Planck equation then shows that the wealth distribution can develop a multimodal shape in presence of observable highly stressed economical situations.