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Alec N Kercheval* (kercheva@math.fsu.edu), Department of Mathematics, Florida State University, 1017 Academic Way, Room 208, Tallahassee, FL 32306-4510, and **Paul M. Beaumont** and **Andrew J. Culham**. *Asset price dynamics with heterogeneous, limited-information agents.*

We study price dynamics in a Lucas economy with a single traded asset and N heterogeneous agents. The asset (stock) pays a stochastic dividend; the agents attempt to learn the correct pricing function while behaving to optimize their infinite-horizon CRRA utility function. Agents are assumed to know the probability distribution of dividends, but not the holdings or preferences of the other agents. In this context we can numerically simulate the evolution of the market, and for log-utility we can solve the N -dimensional market dynamics exactly. (Received August 18, 2007)