

ABSTRACT:

We consider an economy with two agents. Each of the two agents receives a random endowment flow. We model this cumulative flow as the stochastic integral of a deterministic function of the economy's state, which we model by means of a general Ito diffusion. Each of the two agents has mean-variance preferences with different risk-aversion coefficients. The two agents can also trade a risky asset. We determine the agents' optimal equilibrium trading strategies in the presence of proportional transaction costs. In particular, we derive a new free-boundary problem that provides the solution to the agents' optimal equilibrium problem. Furthermore, we derive the explicit solution to this free-boundary problem when the problem data is such that the frictionless optimiser is a strictly increasing or a strictly increasing and then strictly decreasing function of the economy's state.