Abstract

This paper studies a discrete-time financial model with or without transaction costs, in which only partial information can be observed. Partial information model means that the investors in the market can observe no more information except the stock prices. This model has been investigated in Karatzas and Xue (1991), Lakner (1995, 1998), and Cheng (2004), etc. Applying stochastic filtering theory, we investigate the optimal trading strategies in the sense of optimal expected utility, optimal hedging and risk-minimizing.

JEL classification: C3; C61; G11; G14.
Keywords: hedging strategy; optimal expected utility; partial information; risk-minimizing strategy; transaction cost.