Explicit Bayes Solutions to Partially Observable Investment/Consumption Decision Problems

Yoichi Kuwana

Abstract

In this paper, we consider continuous time investment/consumption models for a finite horizon. The drift parameters are assumed to be random variables with prior distributions. Explicit analytic solutions to the Hamiton-Jacobi-Bellman equations associated with the Bayes problems will be derived for classes of utility functions and prior distributions. The optimal strategies will be given as closed form solutions.