OPTIMAL CONSUMPTION CONTROL PROBLEM ASSOCIATED WITH JUMP-DIFFUSION PROCESSES

YASUSHI ISHIKAWA

We study an optimal consumption control problem in a jump-diffusion model under the uncertainty. We show a verification result to the existence of a solution of the Hamilton-Jacobi-Bellman equation associated with the stochastic optimization problem, and then give an optimal consumption policy in terms of the solution. An application to the one-sector Ramsey theory in the economic growth is also given.