

Topic: Singular dividend optimization for a linear diffusion model with time-inconsistent preferences

Date: Wed 21/10/2020 10:00AM

Speaker: [Jinxia Zhu](#)

Affiliation: School of Risk & Actuarial, UNSW Sydney

Abstract: With the advancement of behavioral economics, the of exponential discounting for decision making in neoclassical economics has been questioned since it cannot provide a realistic way to explain certain decision-making behavior. The purpose of this paper is to investigate strategic decision making on dividend distribution policies of insurance companies when the management adopts a more realistic way for discounting, namely stochastic quasi-hyperbolic discounting. The use of this more realistic way for discounting is motivated by some recent developments in behavioral economics. A game theoretic approach is adopted to establish economic equilibrium results, namely subgame perfect Markov equilibrium strategies. It is shown that (1) under certain mild technical conditions, the barrier strategy with an optimal barrier, which is widely used in the traditional approach to optimal dividend problems, is a perfect Markov equilibrium strategy, (2) the optimal barrier is lower than the barrier of an optimal strategy obtained from the respective time-consistent optimal dividend problem, and (3) the solution based on the barrier strategy does not exist in some situations.

Meeting Recording:

https://unsw.zoom.us/rec/share/mJBsEDVhvoip8wakfUgtpN_I6W1FvstglwBbsek4TqV60O-mYd42qV949CRuNdil.nt3DNw8lclCCi3FL