

Statistical Inference in Finance: an Overview and some Specifics

Thomas Hurd

Mcmaster University

Financial models often involve a hidden or partially observed Markov process whose values are inferred from a time series of financial securities. Typically some form of nonlinear Kalman filter is called for. In this talk I make some natural restrictive assumptions that can lead to a consistent and efficient statistical inference scheme. As an illustration, we look at the story of Ford Motor Company through its near-bankruptcy during the recent financial crisis.