Agency Models with Frequent Actions Tomasz Sadzik, UCLA Ennio Stacchetti, NYU April 7, 2013

Abstract

The paper analyzes dynamic principal-agent models with short period lengths. The two main contributions are: (i) an analytic characterization of the values of optimal contracts in the limit as the period length goes to 0, and (ii) the construction of relatively simple (almost) optimal contracts for fixed period lengths. Our setting is flexible and includes the pure hidden action or pure hidden information models as special cases. We show how such details of the underlying information structure affect the optimal provision of incentives and the value of the contracts. The dependence is very tractable and we obtain sharp comparative statics results. The results are derived with a novel method that uses a quadratic approximation of the Pareto boundary of the equilibrium value set.