Bargaining and Learning: the Role of Commitment

E. Faingold, Q. Liu and X. Shi

Abstract. The paper studies wage bargaining between a firm and a worker in an environment where the surplus generated by the worker (if hired) is common knowledge, but there is uncertainty about the worker's outside option. Specifically, there is an exogenous outside market for the worker, which can be either *weak* or *strong,* and the firm and the worker share a common prior about the strength of the outside market. If the outside market is weak, then the worker will never receive an outside offer. If the outside market is strong, than the worker receives an outside offer at a time that is exponentially distributed (with a commonly known positive mean), provided the worker has not yet accepted an offer from the firm. The value of the worker's (potential) outside offer is her private information. We focus on the case where the firm has all the bargaining power, and show that in the limit as the firm makes unboundedly frequent offers, the unique sequential equilibrium outcome has each type of worker accepting the firm's offer at the socially efficient time, and the firm offering a price that smoothly declines deterministically with time. We compare this equilibrium with the outcome that arises when the firm has commitment power, in which case the firm proposes exploding offers that involve inefficiently early deadlines.