

Gradualism in a Principal-agent interaction

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Abstract

This paper theoretically and experimentally analyzes a repeated principal-agent game with varying relative stakes. We examine an environment with asymmetric information. The principal hires an informed agent to observe the state and take action accordingly. There is a high probability that the principal and the agent have misaligned preferences. Repeated play becomes valuable in such a setting by improving the equilibrium payoff of the principal. The agent has reputation incentives that motivate her to take action matching the true state in the initial periods rather than maximize her own period payoff. As Morris (2001) calls, the "discipline effect" of the reputation incentives benefits the principal. We show it is optimal for the principal to start the interaction small and increase the stakes gradually. The agent's reputation incentives are managed so that the reputation increases at the right speed. We experimentally test these predictions in four treatments. Each period receives an equal stake in one treatment. In the other three treatments, the interaction starts small, and the stakes increase at different speeds. We show that the smaller the interaction starts, the higher the reputation incentives of the agent. More importantly, we show that the principal earns a higher payoff in starting-small (gradualism) treatments than the equal-stakes treatment. We contribute to the literature on gradualism by showing it is a valuable tool to improve equilibrium payoffs in the particular principal-agent framework with asymmetric information.

Keywords: Reputation, repeated games, gradualism.

JEL Codes: C72, C90, D82, D83