The Title

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Abstract

This paper

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1 Introduction

Proposition 1 *Suppose agent type a is the only agent type with history h_τ at τ.*

1. *There exists a continuation contract for h_τ for which continuation of the relationship is an equilibrium if*

$$\max_{\tilde{e}\in[0,\bar{e}]} \left[\delta\tilde{e} - c\left(\tilde{e},a\right)\right] \geq \delta\left(\underline{u}+\underline{v}\right). \tag{1}$$

2. *For a satisfying (1), an optimal continuation contract for h_τ has, for all $t \geq \tau$, stationary effort $e_t(a) = e(a)$ that satisfies*

$$\delta e(a) - c\left(e(a),a\right) - \delta\left(\underline{u}+\underline{v}\right) \geq 0. \tag{2}$$

Moreover, for any continuation payoff gains $P_t(a) \geq 0$ and $U_t(a) \geq 0$ for $t \geq \tau$ consistent with the budget balance constraint and independent of t, there exists an optimal continuation contract for h_τ with $w_t(e(a))$ and $\underline{w}_t$ independent of t that has those continuation payoff gains.

*I thank

3. *If (1) is satisfied for type a but efficient effort $e^*(a)$ does not satisfy (2), an optimal continuation contract for h_τ has effort $e(a)$ the highest that satisfies (2) with equality, $P_t(a) = 0$, $U_t(a) = \underline{w}_t - \underline{u} \geq 0$ and*

$$c(e(a), a) = S_t^2(a), \qquad \text{for all } t \geq \tau. \tag{3}$$

If this satisfies (2), it is optimal.

$$\hat{e}(a) = \begin{cases} e^*(a), \text{ if } e^*(a) \text{ satisfies } (); \\ \max e(a) \text{ that satisfies } () \text{ with equality, otherwise;} \end{cases} \quad \text{for } a \in [\hat{\alpha}, \overline{a}]. \tag{4}$$

For a to choose separation, efforts in period t must therefore satisfy

$$\begin{aligned} -\hat{c}(e_t(a, h_t)) \left(\frac{1}{a} - \frac{1}{a'}\right) & \\ &\geq U_t(a, h_t) - U_t\left(a', h_t\right) ?mspace? \\ &\geq -\hat{c}\left(e_t\left(a', h_t\right)\right) \left(\frac{1}{a} - \frac{1}{a'}\right) - \frac{\delta}{1-\delta} \hat{c}\left(\hat{e}\left(a'\right)\right) \left(\frac{1}{a} - \frac{1}{a'}\right). \end{aligned} \tag{5}$$

References