



Optimal Talent Hoarding

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Introduction

Middle managers often engage in **'talent hoarding'** – the practice of retaining talented subordinates within their business units rather than supporting their career advancement (Haeghele, 2022). This practice creates a dilemma: workers who face limited advancement opportunities may either leave for other firms (Cappelli, 2008) or reduce their effort if they stay (Bertrand et al., 2020).

Considering the worker's strategic response, the manager is faced with a tradeoff between the immediate **benefits** of talent hoarding and the future **costs** associated with decreased worker motivation. Using a relational contracting model, we characterize the manager's optimal talent hoarding strategy and identify key factors that influence its intensity.

The optimal relational contract has three phases: **Hoarding, Promotion, and Coasting**. In the first phase, talent hoarding occurs so that the worker will not get promoted even if the promotion opportunity is available. Effort is efficient while job allocation is not. In the second phase, the worker exerts effort and gets promoted when there is an opportunity. Both effort and job allocation are efficient. In the third phase, the worker gets promoted when there is an opportunity, but he will not put in effort. Job allocation is efficient while effort is not.

Model

A risk-neutral manager and a risk-neutral worker interact repeatedly until the worker gets promoted. Time is discrete and denoted as $t = \{1, 2, \dots, \infty\}$. They share the same discount factor δ .

Promotion:

1. Manager privately observes the realization $\rho_t \in \{o, n\}$, with o meaning 'opportunity' and n meaning 'no opportunity'.
2. Public information about the probability: $\Pr(\rho_t = o) = p$.

Technology:

1. Worker's effort: $e_t \in \{0, 1\}$, which is observable but not verifiable.
2. Production output: $Y_t(e_t) = ae_t$, where a measures worker's ability.
3. Cost of effort: $c_t(e_t) = ce_t$.

Decisions:

1. Manager promises a promotion decision d_t^o .
2. Players decide on participation d_t^m and d_t^w .
3. Worker chooses effort e_t .
4. Manager make final decision on promotion d_t^p .

Payoffs:

1. Manager gets output Y_t while worker pays cost c_t . No monetary transfer.
2. After promotion, manager gets B and worker gets b in next period.

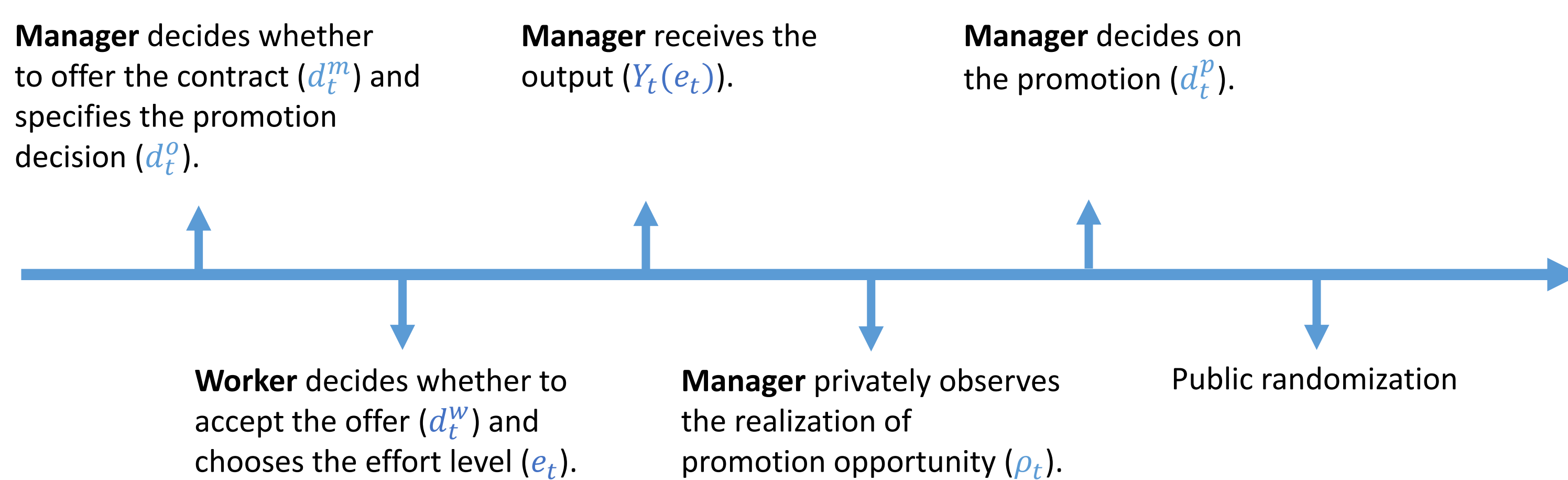


Figure 1. Timeline of Stage Game.

	$e = 1$	$e = 0$
$d_t^o = 1$	Effort, Promotion (E_2)	No effort, Promotion (E_3)
$d_t^o = 0$	Effort, No promotion (E_1)	No effort, No promotion (E_0)

Table 1. Pure Actions.

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Results

We characterize the Perfect Public Equilibrium (PPE) payoff frontier following the recursive method in Abreu, Pearce and Stacchetti (1990). Optimal relational contract is defined as the PPE that maximizes the manager's first-period equilibrium payoff. We have the following major results:

1. **Optimal Relational Contract:** three phases (Figure 2).
2. **Efficiency:** comparison with two benchmark cases (Table 2).
3. **Comparative Statics:** More talent hoarding if worker is more productive or the promotion opportunity arrives more frequently.

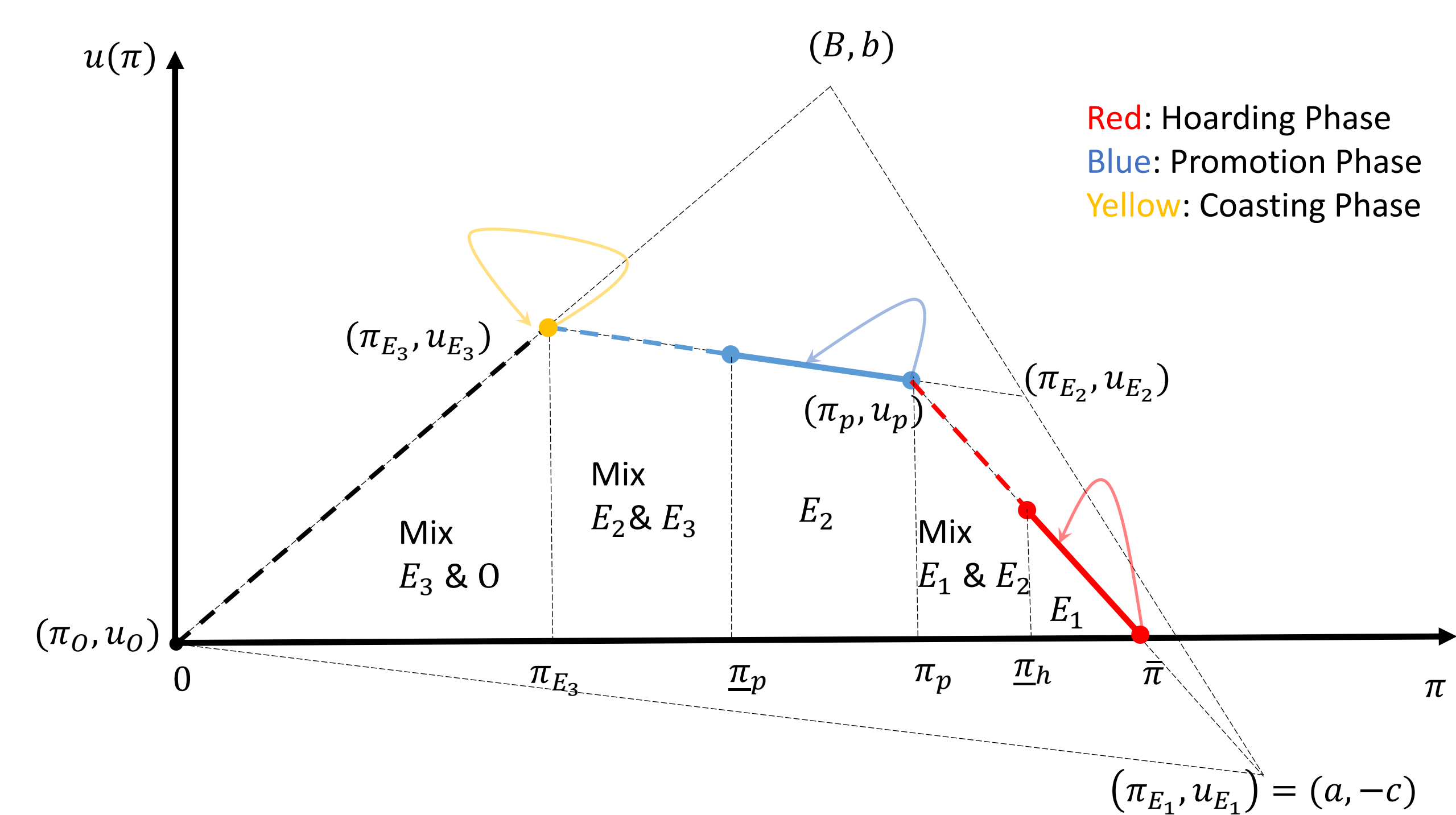


Figure 2. PPE Payoff Frontier.

Allocation	First Best	Private Information			
		Public Information	Hoarding	Promotion	Coasting
Effort	Efficient	Inefficient	Efficient	Efficient	Inefficient

Table 2. Comparison of Efficiency.

Discussion

Layoff: When costless layoffs are permitted, no firing occurs along the equilibrium path. Rational workers, anticipating potential dismissal during the Coasting Phase, respond by randomizing between high and low effort levels upon entering the Promotion Phase.

Replacement: Consider a manager who fills vacancies through random hiring from the external labor market after promoting the incumbent worker. The intensity of talent hoarding decreases as the proportion of talented workers in the external market increases.

Conclusions

Talent hoarding is pervasive in organizations, primarily driven by managers' private information about promotion opportunities. We develop a model where managers privately observe these opportunities and workers respond strategically to managers' actions. This framework allows us to analyze how managers optimally balance the tradeoff between talent retention and worker motivation.

Our analysis yields several insights into the determinants of talent hoarding. As expected, higher worker productivity intensifies hoarding behavior. However, counter-intuitively, more frequent promotion opportunities may not always benefit workers. We also examine how firm policies affect talent hoarding. The ability to fire workers reduces the credibility of managers' promises about future compensation, leading to greater efficiency losses. Additionally, easier access to external talent markets reduces managers' incentives to hoard workers.

References

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