Designing Career Concerns

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Project choice in decentralized organizations

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What factors influence the choices employees make in decentralized settings?

Career concerns and project choice

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Career concerns shape incentives for project choice.

- Employees may favor risky projects with high upside in an attempt to stand out...
- Or they may stick to routine projects with low downside to avoid looking bad

Designing career concerns

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- Tools: Employees may be **prioritized for promotion** and receive monetary **bonuses**

The model

The setting

An organization oversees a set of:

- Employees
- Projects
- Promotions

Timeline

Stage 1. Project selection

Stage 2. Outcomes and promotions

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- Employees choose whether to complete a routine or risky project

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Stage 1. Project selection

- Employees choose whether to complete a routine or risky project

Stage 2. Outcomes and promotions

- Project outcomes are realized
- Organization pays bonuses and allocates promotions

Employees

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Payoffs:

- No direct rewards or costs from project choice
  - Abstract from moral hazard
- Benefit $V > 0$ from being promoted
  - Unpledgeable due to limited liability

Projects

Two classes of projects:

- Routine
- Innovative

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Two classes of projects:

- Routine
  - Homogeneous, in excess supply
  - Generates a profit of $K \in (0, 1)$ for the organization
- Innovative
  - Heterogeneous, good projects in short supply
  - Project $n \in [0, 1]$ generates a profit of 1 with probability $\gamma(n)$, and 0 otherwise
  - $\gamma(n)$ is strictly decreasing, $\gamma(0) > K > \gamma(1)$

Random matching

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- One routine project
- One innovative project

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One-to-one matching between employees and innovative projects.

- Could represent idea generation or competition for projects
- Without loss assign label i to the employee matched with innovative project $i \in [0, 1]$

Employee quality

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- Outcomes of routine projects don't depend on type
- Probability of success on innovative project n is:

$$q_i(n) \propto \begin{cases} \gamma(n), & \theta_i = H \\ 0, & \theta_i = L \end{cases}$$

- Success reveals an employee is High-quality, failure is ambiguous

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Employees are ex ante homogeneous: $\Pr(\theta_i = H) = \pi \in (0, 1)$.

Promotions

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- If the promotion is filled:
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- If the promotion is unfilled: 0

Information structure

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Privately observed by employees:

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Publicly observed:

- Project outcomes

Related literature

Career concerns: Holmstrom (1982/99), Gibbons, Murphy (1992)

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What we do: Design career concerns

Tournaments: Lazear, Rosen (1981), Green, Stokey (1983), Nalebuff, Stigliz (1983), Rosen (1986)

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What we do: Promotions serve a selection role

The design problem

The outcome without commitment

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Result: Equilibrium innovation rate is generally not profit-maximizing.

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Equilibrium project choice depends on scarcity of promotions β:

- Low β: All agents innovate
- High β: No agents innovate

The mechanism design problem

Organization can use two tools to align incentives:

1. Promotion policy

2. Bonuses

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Organization conditions promotions and bonuses on each employee's project outcome.

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2. How much innovation should occur?
   - Depends on R, the value of promoting agents efficiently
     - How critical is the role being filled?
     - How easy is it to replace an employee who's a bad fit for the new role?
     - How informative is current-job performance about the new role?

Optimal incentive schemes

Thin internal labor markets

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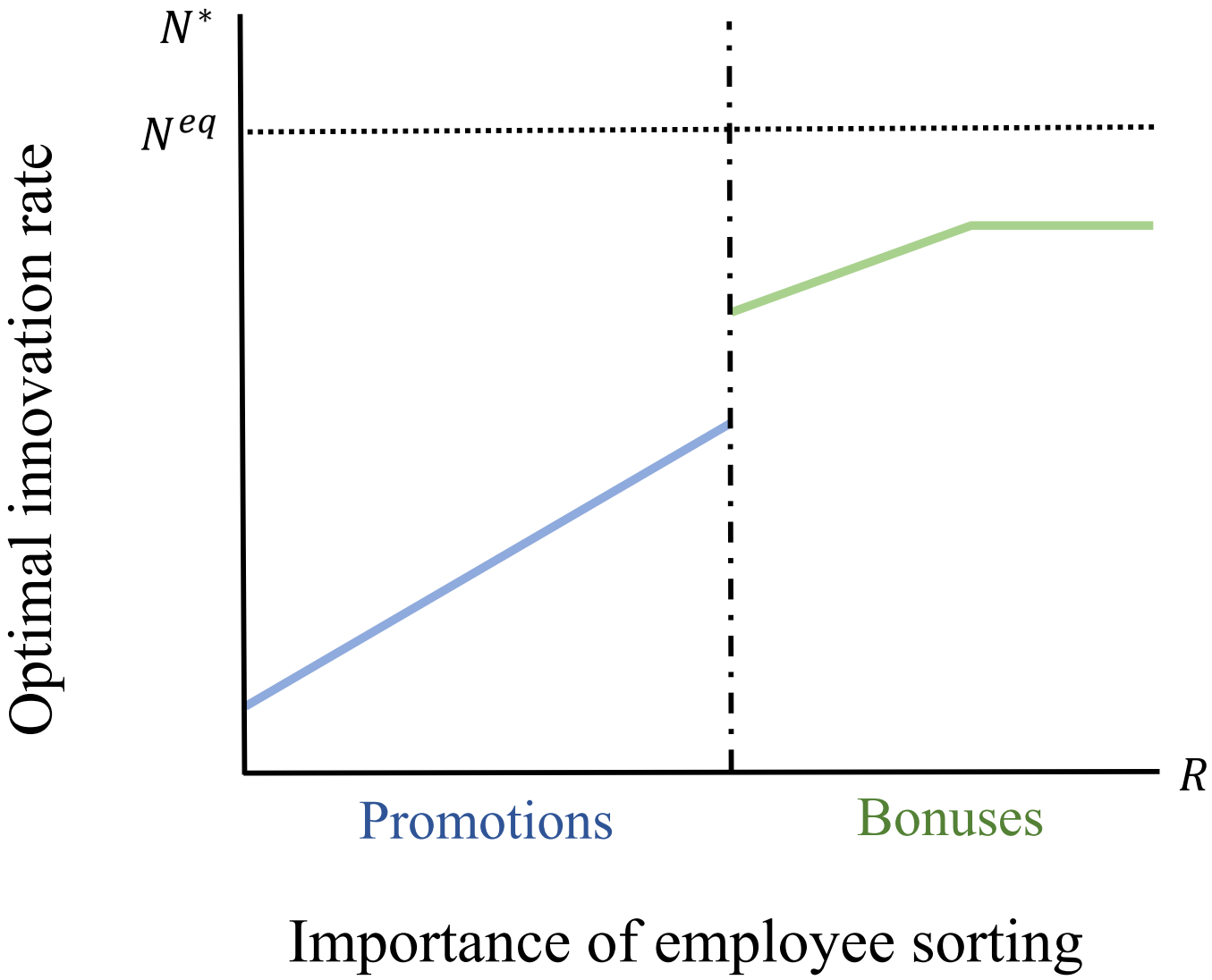
- Low-powered: Pay bonuses for completing routine projects, promote efficiently
- High-powered: Overpromote middling outcomes, underpromote big successes, don't pay bonuses

Thin internal labor markets



Thick internal labor markets

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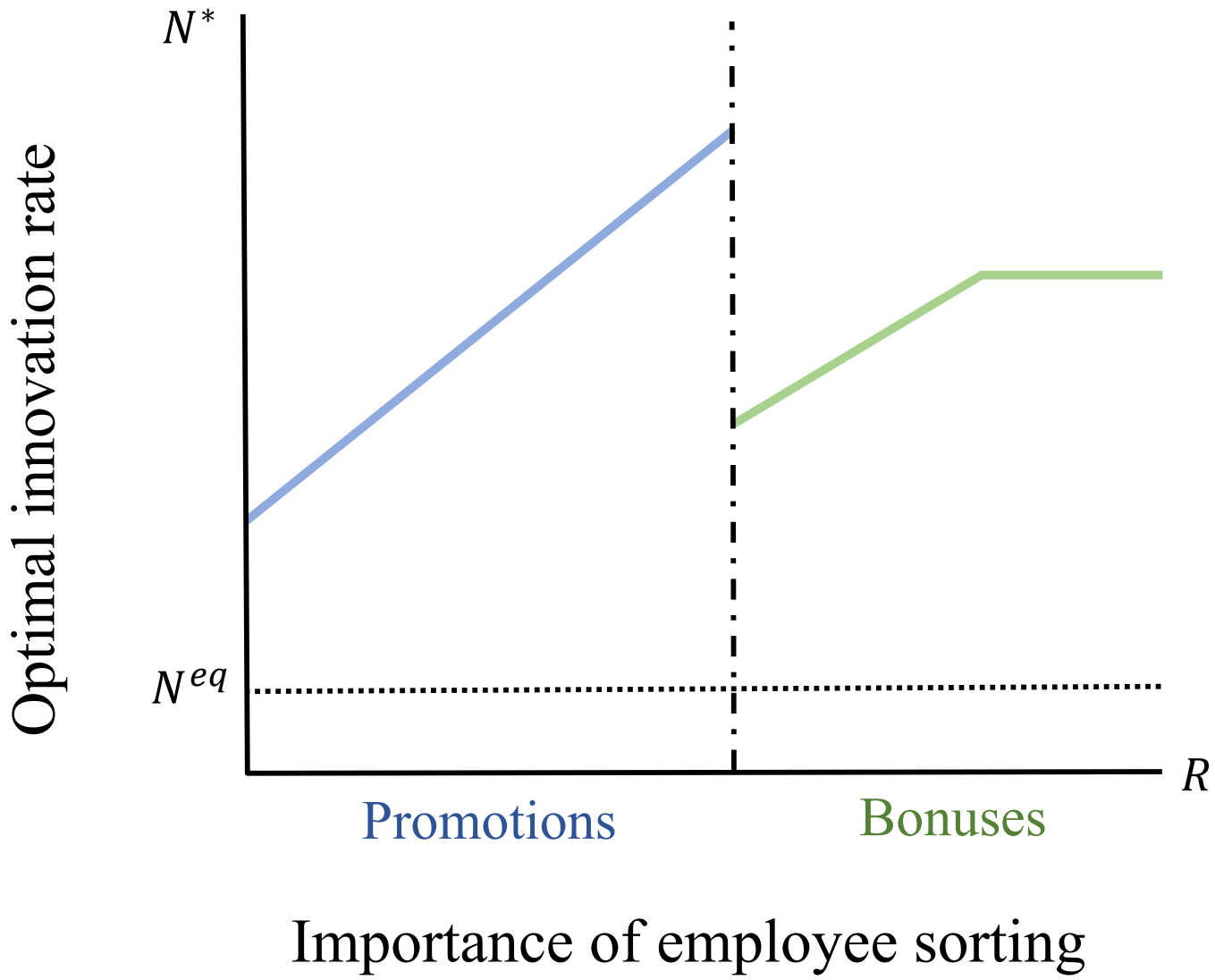

Conclusion

Concluding thoughts

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Future work:

- Incentive schemes versus top-down project allocation
- Moral hazard
- Heterogeneous employees