

# Pay for Performance and Beyond

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# The Principal-Agent Problem

- Employer-Employee, Client-Lawyer, Board-CEO, etc.
- Two difficulties
  - Preferences not aligned
  - Performance imperfectly measured
- Incentive
  - Contracted pay based on *measured* outcome

# First best and second best

Total surplus:  $P$ 's Benefit –  $A$ 's Cost – Risk cost

First best cases:

- agent's choice verifiable  $\Rightarrow$  fixed wage
- agent risk neutral  $\Rightarrow$  rental agreement

Second best:

- balance incentives against risk

# Informativeness Principle

- What information is valuable for incentive contracting?
  - Anything that is informative about the agent's choice of action (Holmstrom 79, Shavell 79)
  - Information that is not informative should be excluded
- Old accounting principle: pay should only depend on variables that the agent can control
- Relative Performance Evaluation and Controllability

# Lessons from informativeness

## Pros:

- Reveals exactly how model “thinks”
- Explains puzzles about basic P-A model

## Cons:

- Incentive contract oversensitive to information
- Model of limited use for predicting optimal shape of incentive contract (Grossman-Hart 83)

# Why are contracts linear? (H-M 87)

Mirrlees' example: punishing very rare failures very severely approximates first-best

Dynamic version: invites gaming

Linear scheme (commission) optimal because it provides constant incentive pressure and avoids gaming (robust)

# Linear model with one task

Stronger incentive (higher commission) when

- Performance measure more precise (less risk)
- Agent less risk averse
- Value of agent's effort higher
- Agent's responsiveness to incentive higher

First three “obvious” – last one the key

# Multitasking (H-M 91, Baker 92)

- Many tasks changes the game
- Challenging when easy to measure and hard to measure tasks compete for agent's attention
  - Quantity versus quality
- Related cases
  - Measures are misaligned with objective
  - Measures can be easily manipulated



# Scandals: “you get what you pay for”

- Wells Fargo – fake performance
- BP and oil Gulf spill – excessive output incentives at the expense of safety
- Enron – conflicting incentives between main firm and subsidiaries
- Teachers –teaching to the test

# Lessons from multitasking

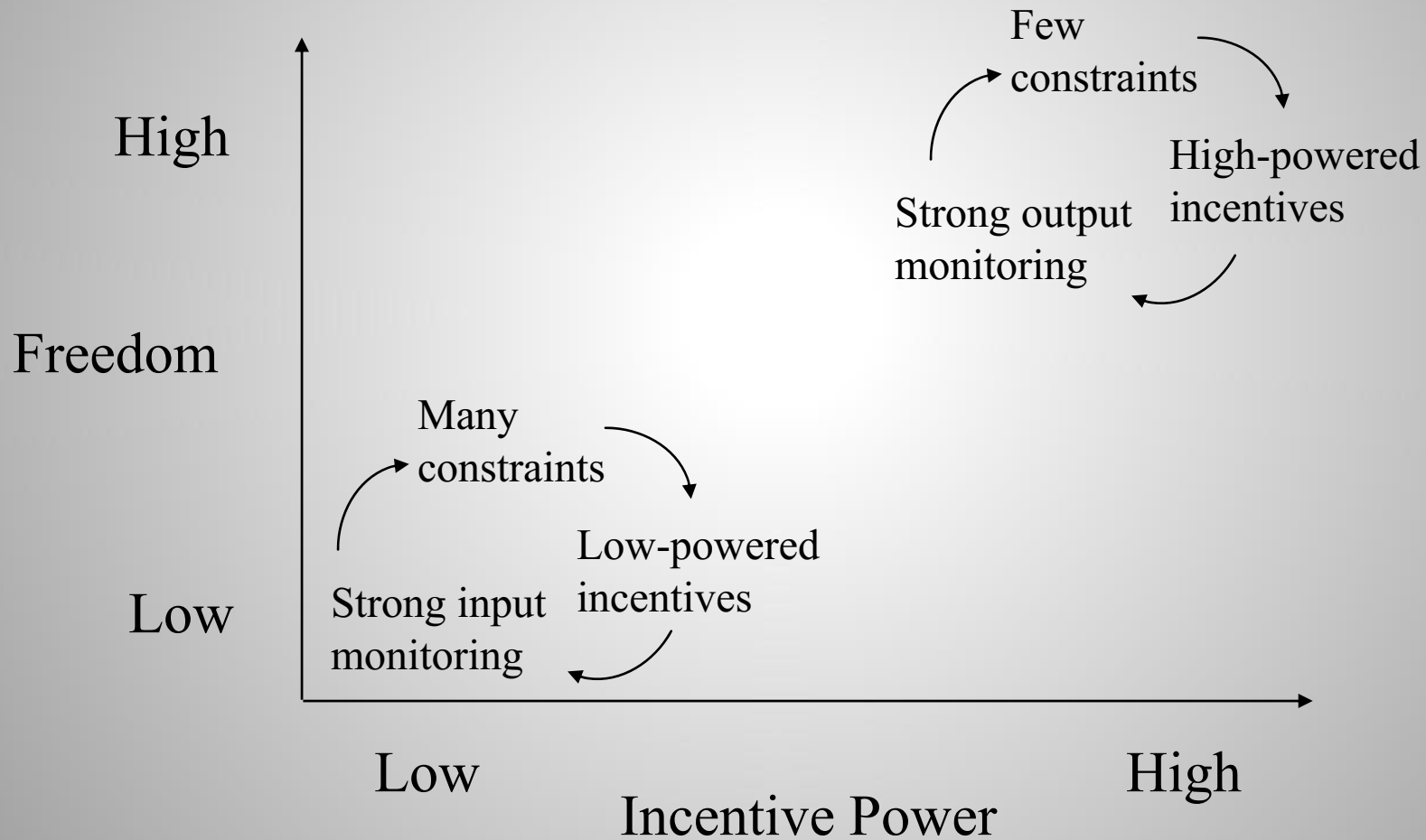
- Two ways to provide incentives for task
  - Pay more for that task
  - Pay less for competing (substitute) tasks
- Low powered incentives
  - Low or no incentive may be best incentive when an important task hard to measure
  - Highly controllable task may not be incentivized

# Alternative incentives within firm

- Job design
  - Define tasks (Google – 20% freedom)
  - Split up easy-to-measure tasks and hard-to-measure tasks
- Bureaucratic rules and constraints
  - Work in the office rather than at home
  - Can't work for other companies
- Authority, career paths, supervision, recruiting, accounting...

Key driver: Employee's want to be appreciated

# Employment vs Contracting



# Two roles of firm boundaries

- External role (Grossman-Hart-Moore)
  - Assets strategic chips in market
- Internal role (Jensen 80, Holmstrom 99)
  - Assets empower firms to set *rules of the game* and restructure incentives (a firm is no democracy)
  - Firm coordinates the use of incentives (especially on production side)

# Concluding remarks

- There is a lot beyond pay-for-performance
- Multitasking relevant regardless of which instruments are being used (Dewatripont-Jewitt-Tirole 99)
- Desire to be appreciated may also lead to pandering and influence costs (Holmstrom 82, Milgrom-Roberts 92)
- How will the changing nature of work affect incentives?

Bob  
Wilson



Paul  
Milgrom



Jean  
Tirole



John  
Roberts



Joan  
Ricart



Oliver  
Hart



Milt  
Harris



Thank You!



George  
Baker



Mike  
Gibbs



Drew  
Fudenberg



Tri Vi  
Dang



Gary  
Gorton