

# Lecture 15: Career Concerns

## Compensation in Organizations

Jacob Kohlhepp

November 22, 2025

# Roadmap

- ▶ In the first half of the class we discussed explicit performance pay.
- ▶ Last lecture we discussed one alternative: relational contracts.
- ▶ I work hard because I don't want to lose a good job.
- ▶ This lecture we consider another alternative: career concerns.
- ▶ I work hard at my current job to get a better future job at another company.

Discussion: Fee and Hadlock (2003)

## Model

- ▶ There are two firms and one worker.
- ▶ The worker has a skill level  $a$  that no one knows.
- ▶ However, everyone knows that skills are distributed uniformly between  $[0, A]$ . That is,  $a \sim U[0, A]$
- ▶ The worker exerts unobserved, costly effort:  $c(e) = e^2/2$
- ▶ Revenue is equal to effort plus skill:  $y = e + a$
- ▶ The worker is hired and chooses effort in two periods.
- ▶ The worker is hired in each period by the firm that posts the highest wage, and if there is a tie they randomly pick a firm (the Bertrand model)
- ▶ All outside options are 0.

## Thinking About First-Best

- ▶ A helpful fact: the mean of a uniform random variable is just the average of the lower and the upper bound, so:  $E[a] = (0 + A)/2 = A/2$

## Thinking About First-Best

- ▶ A helpful fact: the mean of a uniform random variable is just the average of the lower and the upper bound, so:  $E[a] = (0 + A)/2 = A/2$
- ▶ In a single period, the first-best level of effort solves:

$$\max_e E[a + e - c(e)] = \max_e A/2 + e - e^2/2$$

## Thinking About First-Best

- ▶ A helpful fact: the mean of a uniform random variable is just the average of the lower and the upper bound, so:  $E[a] = (0 + A)/2 = A/2$
- ▶ In a single period, the first-best level of effort solves:

$$\max_e E[a + e - c(e)] = \max_e A/2 + e - e^2/2$$

- ▶ Taking the FOC wrt  $e$ :

$$e_{FB} = 1$$

## Diagram of the Model

See the board!



## Solving the Model

See the board!

# Solution

## Theorem 1

*If uncertainty about skill is large enough ( $A \gg 0$ ), career concerns motivate the worker to provide first-best effort in the first period,  $e_1^* = 1$ .*

- ▶ The worker works hard to prove his/herself in period 1
- ▶ The worker reaps the reward for this in period 2
- ▶ The strength of career concerns depends on how uncertain the market is about a worker's skill.
- ▶ This is captured by  $A$ .

## Wages Over Time

- ▶ Skill ( $a$ ) is initially unknown and everyone is paid the same wage:  $A/2 + 1$
- ▶ Skill ( $a$ ) is revealed when revenue realizes.
- ▶ Then each worker is paid their skill.
- ▶ This implies two things:
  - ▶ Wages of two workers become more dispersed over time
  - ▶ Wages may go up or down, with most going down.

## Effort Over Time

- ▶ Effort in the first period is high (the first-best level)
- ▶ Intuition: prove yourself when young, take it easy while old.

# Crucial Ingredients for Career Concerns

- ▶ There must be competition for the worker.
- ▶ Revenue in period 1 must be observed by everyone.
- ▶ Discussion: in what occupations is this true/not true?
- ▶ These are crucial because they allow the worker to internalize the benefits of effort/skill through higher wages in period 2.