SUBTLE DISCRIMINATION

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Discussion

by

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1. *General Overview*

- Shows how small sources of discrimination can have large impact on outcomes.

- Main results: Subtle discrimination affects discriminated agents:

1. Discourages effort in high salary industries, encourages it in low salary;

2. Promotion gap is greater in high salary industries,

3. Subtle discrimination may:

- Hurt favored agents in high productive industries;

- Favors discriminated agents in low-productivity industries;

- Social surplus may increase with subtle discrimination.

4. Optimal Sorting: High (low) productivity firms may choose no (full) bias.

2.   Comments

- ***In two words: Great paper!***

Paper provides a clear benchmark:

- *Small biases have big impact in environments with otherwise identical agents.*

- *Model explain several empirical facts, as achievement and promotion gaps, heterogenous impact in high vs low human capital industries;*

My discussion:

- Some modeling issues;

- Possible extensions/future work.

Comment 1: Effect of bias on effort

Subtle effect which depends on several details (common in innovation models).

Agent problem for the disadvantaged (red) agent:

$$max_{e_r} \ w_H e_r (1 - e_b) + (0.5 - \beta) w_H e_r e_b + (0.5 - \beta) w_L (1 - e_r)(1 - e_b) - k \frac{1}{2} e_r^2$$

FOC: for red agent (set *k = 1*)

$$e_r = w_H - (0.5 - \beta) w_L + e_b \big((0.5 - \beta)(w_H + w_L) - w_H \big)$$

Effort can be complement or substitute depending on

- $A \equiv (0.5 - \beta)(w_H + w_L) - w_H > 0 \ \Rightarrow$ complement

$$< 0 \ \Rightarrow \ \text{substitute}$$

For red, look at the sign of

$$A = (0.5 - \beta)(w_H + w_L) - w_H$$

Usually, w_L is small, say $\boldsymbol{w_L = 0}$ and

$$A = -(0.5 + \beta)w_H < 0 \quad \Rightarrow \quad strategic\ substitute$$

FOCs for the two types:

For red: $e_r = w_H - (0.5 + \beta)\,w_H\,e_b$

- Effort is strategic substitute;

- Discrimination decreases effort;

For blue: $e_b = w_H - (0.5 - \beta)\,w_H\,e_r$

- Effort is strategic substitute;

- Discrimination increases effort;

Here: $w_L = w_H$ and FOCs are

- Blue agent: $e_b = (0.5 - \beta)w_H + 2\beta w_H e_r$

- Red agent: $e_r = (0.5 + \beta)w_H - 2\beta w_H e_b$

For *blue agent*:

- Effort are strategic *complement*, β is *detrimental* for small effort from red.

For *red agent*:

- Effort are strategic *substitute*, β is *beneficial* for small effort from blue.

Paper should be more transparent about these incentives.

Key parameters:

- *Value of projects:* **H**, which drives w_H and ultimately effort *e.*

- *Salary difference:* $w_H - w_L$

Issues to discuss:

a. **Optimal compensation contracts** in Proposition 5 are derived under the assumption that the **firm does not operate** if both agents fail to develop human capital, effectively setting $w_L = 0$.

What is the sequencing of moves?

The model is one of internal promotion. The firm already exists.

Perhaps this is a choice on a new venture?

Importantly: The incentive structure is different !

The objective function for the firm has $w_L = 0$ while the ojective function for emplyees has $w_L = w_H$.

Not clear how to relate to previous analysis….

Issues to discuss:

b. ***New searches:*** paper assumes that one of the agent is promoted even if he/she is low skill.

Would be interesting to see is a new search is started.

There would be a partial loss of value (time, search costs, loss of revenues...) to be considered, but....

In this case, again, $w_L = 0.$

Possible extensions and future work:

a.   Modeling labor market

Model assumes that firms face 50/50 split between red and blue employees.

Discrimination has an impact on labor market.

There will be sorting, affecting promotion probabilities.

Sorting and equilibrium matching will be important if employees are heterogenous, i.e different productivity, or probability of success.

Heterogeneity may come from an ex-ante investment in human-capital.

Conjecture: high quality red employees may still apply, affecting tie-breaker.

In equilibrium, red employees may be of better ex-ante quality.

b. ***Size of the organization may matter***

Easier to detect systematic biases, even subtle, in larger organizations.

Role for reputation building?

c. ***Tie breakers are important.***

Tie breakers are less likely with finer scale (probability zero with a continuum).

A role for an endogenous rating scale?

Altogether: Great paper !!