

Discrimination

1 Introduction

- A. Opportunity vs Result
- B. Market or premarket
- C. Cause of discrimination

2 Earnings Disparities

- A. Discuss Figure 12.1 and Tables 12.1-12.3 (v6)
- B. Estimation
 - 1) Correct for differences in other variables
 - a) Education: quantity and quality
 - b) Age and experience
 - c) English proficiency
 - 2) Rest is alleged due to discrimination
 - 3) May actually be due to unobserved variables correlated with sex or race

3 Theories of Discrimination

- A. No discrimination: where is the evidence?
- B. Prejudice
 - 1) Prejudice of employers: why aren't they competed out of business?
 - 2) Prejudice by customers
 - 3) Prejudice by employees
- C. Statistical discrimination
 - 1) Discuss Phelps
 - 2) Discuss insurance rating
 - 3) Discuss self-fulfilling priors

4 Discrimination by Consumers

Consider a firm that maximizes profits in a world without discrimination:

$$\max \pi = pf(W, B) - w_W W - w_B B.$$

Then FOC's are

$$\begin{aligned} pf_W - w_W &= 0; \\ pf_B - w_B &= 0. \end{aligned}$$

If blacks and whites are perfect substitutes and equally productive, then the problem becomes

$$\max \pi = pf(W + B) - w_W W - w_B B$$

with FOC's

$$\begin{aligned} \frac{\partial \pi}{\partial W} &= pf' - w_W = 0; \\ \frac{\partial \pi}{\partial B} &= pf' - w_B = 0. \end{aligned}$$

Now consider a firm where the price the firm can charge for its product depends upon the ratio of black to white workers:

$$\max \pi = p \left(\frac{B}{W} \right) f(W + B) - w_W W - w_B B$$

with $p' < 0$. Then the FOC's are

$$\begin{aligned} \frac{\partial \pi}{\partial W} &= -\frac{B}{W^2} p' f + pf' - w_W = 0; \\ \frac{\partial \pi}{\partial B} &= \frac{1}{W} p' f + pf' - w_B = 0. \end{aligned}$$

Note that

$$w_W = pf' - \frac{B}{W^2} p' f > pf' > pf' + \frac{1}{W} p' f = w_B.$$

Now consider a case where there is a "black" market and a "white" market. The firm's problem becomes

$$\max \pi = p_1 \left(\frac{B_1}{W_1} \right) f(W_1 + B_1) + p_2 \left(\frac{W_2}{B_2} \right) f(W_2 + B_2) - w_W (W_1 + W_2) - w_B (B_1 + B_2)$$

with FOC's

$$\begin{aligned} \frac{\partial \pi}{\partial W_1} &= -\frac{B_1}{W_1^2} p_1' f(W_1 + B_1) + p_1 f'(W_1 + B_1) - w_W = 0; \\ \frac{\partial \pi}{\partial W_2} &= \frac{1}{B_2} p_2' f(W_2 + B_2) + p_2 f'(W_2 + B_2) - w_W = 0; \\ \frac{\partial \pi}{\partial B_1} &= \frac{1}{W_1} p_1' f(W_1 + B_1) + p_1 f'(W_1 + B_1) - w_B = 0; \\ \frac{\partial \pi}{\partial B_2} &= -\frac{W_2}{B_2^2} p_2' f(W_2 + B_2) + p_2 f'(W_2 + B_2) - w_B = 0. \end{aligned}$$

We can show that at least one of the two markets is segregated; i.e., either $B_1 = 0$ or $W_2 = 0$. Consider the alternative. Consider switching one black

from market 1 to market 2 and one white from market 2 to market 1. The change in profits is

$$\begin{aligned} & \left(\frac{\partial \pi}{\partial W_1} - \frac{\partial \pi}{\partial W_2} \right) + \left(\frac{\partial \pi}{\partial B_2} - \frac{\partial \pi}{\partial B_1} \right) \\ &= -\frac{B_1}{W_1^2} p_1' f(W_1 + B_1) - \frac{1}{B_2} p_2' f(W_2 + B_2) \\ & \quad - \frac{W_2}{B_2^2} p_2' f(W_2 + B_2) - \frac{1}{W_1} p_1' f(W_1 + B_1) \\ &> 0. \end{aligned}$$

Explain intuition.

5 Public Policy

- 1) Comparable worth
- 2) Affirmative action and quotas