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
\[
pf_W - w_W = 0;
\]
\[
pf_B - w_B = 0.
\]
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

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

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

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

Note that

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

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

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

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

\[
\left( \frac{\partial \pi}{\partial W_1} - \frac{\partial \pi}{\partial W_2} \right) + \left( \frac{\partial \pi}{\partial B_2} - \frac{\partial \pi}{\partial B_1} \right)
\]

\[
= -\frac{B_1}{W_1} p_1' f (W_1 + B_1) - \frac{1}{B_2} p_2' f (W_2 + B_2)
\]

\[
- \frac{W_2}{B_2} p_2' f (W_2 + B_2) - \frac{1}{W_1} p_1' f (W_1 + B_1)
\]

\[
> 0.
\]

Explain intuition.

5 Public Policy

1) Comparable worth
   2) Affirmative action and quotas