

# Topics in Economics of Discrimination: Outline I

## I. Preliminaries

1. Definition of Discrimination
  - a. Economic Definition: To offer different transaction terms to individuals differing only by group membership.
  - b. Discrimination as deviation from competitive equilibrium, e.g.  $W = MRP = P \cdot MP$ .
2. Overview of the perfect labor market: (Firm's maximize profit and workers maximize utility)
  - a. Supply side: individuals rent time on market provided utility from wage equals value of time.
  - b. Demand Side: Firms hire up to point where wage equals value of output of last unit employed ( $W = MRP$ ).
  - c. At equilibrium,  $W = MRP =$  worker value of time.
  - d. Discrimination is a deviation from perfect equilibrium.
3. Some deviations from perfect labor markets.
  - a. Wage setting union: constraints on wage adjustment.
  - b. Supply fixing licenses: constraints on quantity adjustments.
  - c. Job rationing due to the business cycle.
4. Accommodating heterogeneity in jobs or workers.
  - a. Compensating differentials and equilibrium wages.
  - b. Human Capital and equilibrium wages.

## II. Theories of Discrimination

1. Becker taste theories of discrimination
  - a. Employer discrimination
    - Employers maximize utility.
    - Workers are perfect substitutes.
    - Employers may prefer group W over group N.
    - Discrimination coefficient  $d_i$ .
    - Employer equates  $W_N (1 + d_i) = W_W$ .
    - Market discrimination coefficient d.
      - $d_i > d$  implies hire W at  $W_W$ .
      - $d_i < d$  implies hire N at  $W_N$ .
    - Firms pay for discrimination by accepting lower profits.
    - Importance of the distribution of discriminatory tastes.
    - Importance of the size of the discriminated group.
    - Role of product competition.
    - Discrimination in the short- and long-run.
    - Equal Pay Act .
    - Evidence
      - Competition for labor in baseball.
      - Minority hiring in monopoly vs. competitive markets.
      - Women in deregulated financial institutions.
      - Black and Brainerd: globalization.
      - Bertrand and Mullainathan on Emily and Lakisha.

## b. Employee discrimination

Employers maximize profits.

Employees maximize utility.

W workers prefer working with W over N.

W workers paid  $W_W$  in segregated markets,  $W_W(1+d_i)$  in integrated markets.

Implication: segregated firms have higher profit.

Physical distance versus social distance.

Subordinate preferences and probability of promotion.

Evidence

Gallup polls on supervisor preferences.

Levitt on Weakest Link.

Segregation in the government: the U.S. military before and after the Korean War

## c. Customer discrimination

Employers maximize profits.

Customers maximize utility.

W customers prefer product/service produced by W.

Customers equate  $P_N(1 + d_i) = P_W$ .

If  $W = MRP$ ,  $P_N < P_W$  implies  $MRP_N < MRP_W$  which implies  $W_N < W_W$ .

Importance in sales and service versus manufacturing jobs.

Implications for segregated workplace, occupations.

Evidence

Protected Class employment by government agency (HUD vs. USDA).

Nardinelli and Simon on baseball cards.

Holzer and Ihlanfeldt on composition of customers and last hired.

## d. Discrimination against customers

Firms maximize utility.

W firms prefer to provide service to W customers.

Charge  $P_W$  to W customers and  $P_W(1+d_i)$  to N customers.

Evidence

1968 Fair Housing Act studies (summarized in Yinger).

Car Sales (summarized in Yinger).

Equal Credit Opportunity Act studies (Ladd).

Schelling simulation of housing segregation.

## 2. Audit studies

### a. Methodology

Simulated market transaction using audit pairs.

Equal observable attributes except protected class status.

Randomized firm and order of visit.

Strengths and weaknesses versus analyzing market transactions.

Individual versus market discrimination coefficient.

Training bias: auditors may skew outcomes.

Randomization bias: customers do not randomize firms.

Gross versus net discrimination.

Equal treatment versus unequal treatment.  
Differences between audit versus transaction (regression) studies.

### 3. Crowding

#### a. Segregation index

Method

Interpretation

Evidence

#### b. Predominantly Female Jobs and Wages

#### c. Assumptions

Women are excluded from prestige sectors.

Men can enter all sectors.

Firms maximize profits, so  $W = MRP$  in all sectors.

#### d. Results

$W_F < W_M$  due to crowding in female jobs.

Men have no incentive to enter female jobs, so occupational segregation results.

Wage differences increase as number of F increase.

Men have incentive to collude to restrict entry of women.

#### e. Government policy

Affirmative Action.

Equal Pay Act.

#### f. Concerns

Source of discrimination?

Does profit motive cause discrimination to break down over time?

Why don't firms take chances on women at lower pay?

### 4. Statistical discrimination

#### a. Assumptions

Firms maximize profit.

Firms use noisy signals to make hiring, compensation and job allocation decisions.

Signals are noisier for group N than group W.

#### b. Results

Given a noisy signal, say a test score, Firms will

Project higher than average productivity for N at low levels of the test.

Project lower than average productivity for N at high levels of the test.

Reward W at a higher rate as the test score rises.

If firm risk averse, N will be downgraded more for the higher variance of signal.

If signals improve over time, N may have higher pay increases as firm gains information on skill.

#### c. Type 1 versus type 2 error in hiring

- d. What if firms subjectively presume lower mean skill for N versus W?
- e. Does statistical discrimination persist over time in competitive markets?
- f. Government Policy
  - Affirmative Action
  - Equal Pay Act
- g. Evidence: Pinkston

## 5. Internal Labor Markets

- a. Definition: The job allocation, compensation and promotion decisions made within a firm that are insulated from the external labor market
- b. Entry Ports and Job Ladders
- c. Factors that Lead to Internal Labor Markets
- d. Examples
  - Chemical Plant , Doeringer and Piore
  - Electric equipment plant, Kelly
- e. How can internal labor markets lead to discrimination?
- f. How can internal labor markets lead to persistent discrimination?
- g. Evidence
  - Historical: Goldin
  - Ames Fire Department Admission Test
  - California Merit System
  - Firm size and gender segregation (Bielby and Baron)
  - Finnish metalworking plants: Pekkarinen and Vartiainen
  - Race of the Hiring Agent: Stoll et al
  - Can the firm profit from accommodating families: Arthur and Cook.
- h. Policies
  - Affirmative Action
  - Equal Pay Act
  - Title VII of the Civil Rights Act