Labor Market Discrimination

- In previous chapters we analyzed how differences in the characteristics of jobs or the skills of workers generate wage dispersion in competitive market.

- Discrimination (in terms of earnings and/or employment) occurs when the marketplace takes into account such factors as race and sex when making economic exchanges.

- Men earn more than women, and whites usually earn more than nonwhites.

- In empirical studies, researchers are focused on estimating the size of labor market discrimination, if any, rather than finding out the causes of discrimination.

- Wage differentials between gender groups are prevalent almost every country.

- OECD reports that average wages of female workers is 61 compared to 100 of male workers in Korea, 2005.

- Gender gap seems to be much severe in the Korean labor market → the ratio is 81 for the U.S., 79 both for UK and Canada, 84 for Australia, etc.

Employer Discrimination

- If blacks and whites are perfect substitutes, so production function can be written as: $Q = f(Ew + Eb)$

- If the market wage for black workers were below the market wage for white workers, the color-blind firm would hire only black workers, and vice versa.

- If employer somehow prefers white workers, he conceives the wage of black worker as $Wb(1+d)$ → "d" is the discrimination coefficient.

- Wage of white workers is Ww.

- The employer will then hire whichever input has a lower utility-adjusted price.

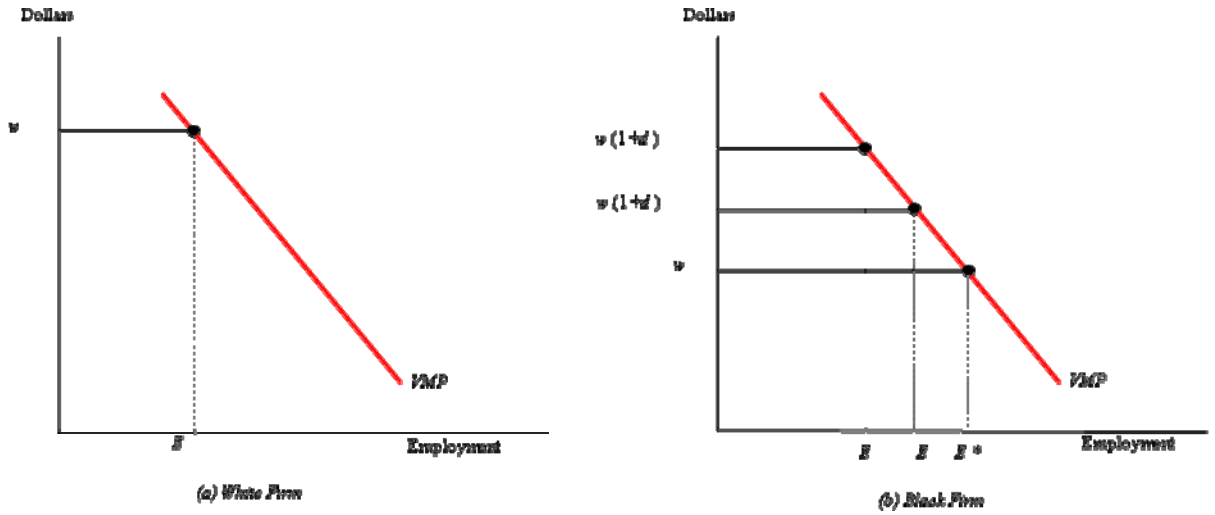
- Hire only blacks if $Wb(1+d) < Ww$

- Hire only whites if $Wb(1+d) > Ww$

- The key implication of the Becker model of employer discrimination → as long as black and white workers are perfect substitutes, firms have a segregated workforce.

- The number of black workers hired is smaller for firms that have larger discrimination coefficients.

[Figure 1] The Employment Decision for a Prejudiced Firm



Employee Discrimination

- Suppose that whites dislike working with blacks and blacks are indifferent about the race of their coworkers.

- Consider the situation where one firm has a completely white workforce and the other firm has in integrated workforce, consisting of black and white workers.

- Because the white dislikes the integrated firm, they will choose to work in the whites workplace → employee discrimination implies a completely segregated workforce but does not generate wage differentials between equally skilled black and white workers.

Customer Discrimination

- If customers have a taste for discrimination, their purchasing decisions are not based on the actual price of the good, but on the utility-adjusted price, or p*(1+d).

- As long as a firm can allocate a particular worker to one of many different positions within the firm, customer discrimination may not matter much.

- The firm can place its black workers in jobs that require little customer contact and place whites in the service division.

- Customer discrimination can have an adverse impact on black wages when the firm cannot easily hide its black from public view.

- A recent survey of employers conducted in four metropolitan areas (Atlanta, Boston, Detroit, and Los Angeles) shows how the interaction the customers' racial background and the extent of the contact between the workers and the customers alters the hiring decisions of firms.

- Face-to-face contact between black workers and whit customers substantially lowers the probability that the firm hires black workers.

Holzer and Ihlanfeldt (QJE, 1998)

Type of Firm	More than 50% of the firm's customers are Black	More than 75% of the firm's customers are White	Difference
Contact with customers	58.8%	9.0%	49.0%
No contact with customers	46.6%	12.2%	34.4%
Difference-in-differences			14.6%

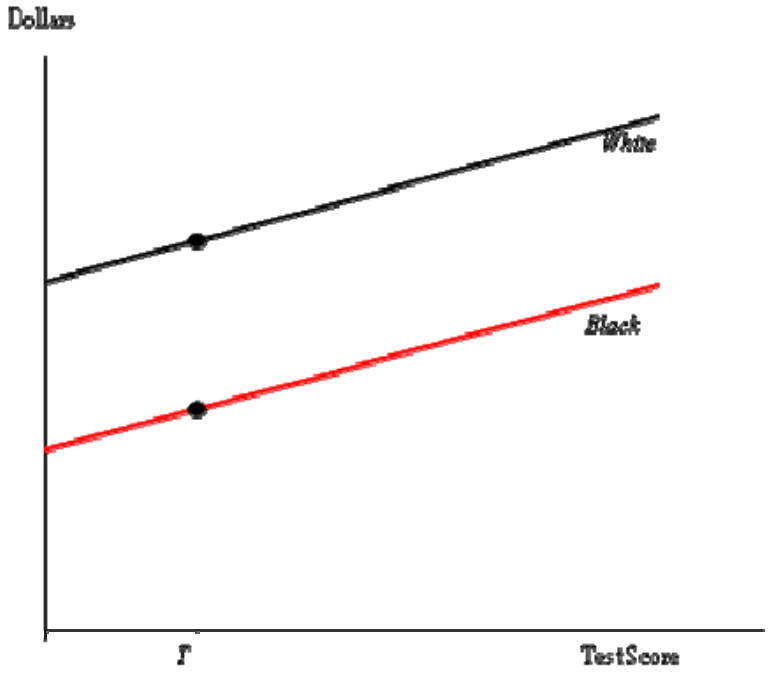
Statistical Discrimination

- Statistical discrimination is based on treating an individual on the basis of membership in a group and knowledge of that group's history.

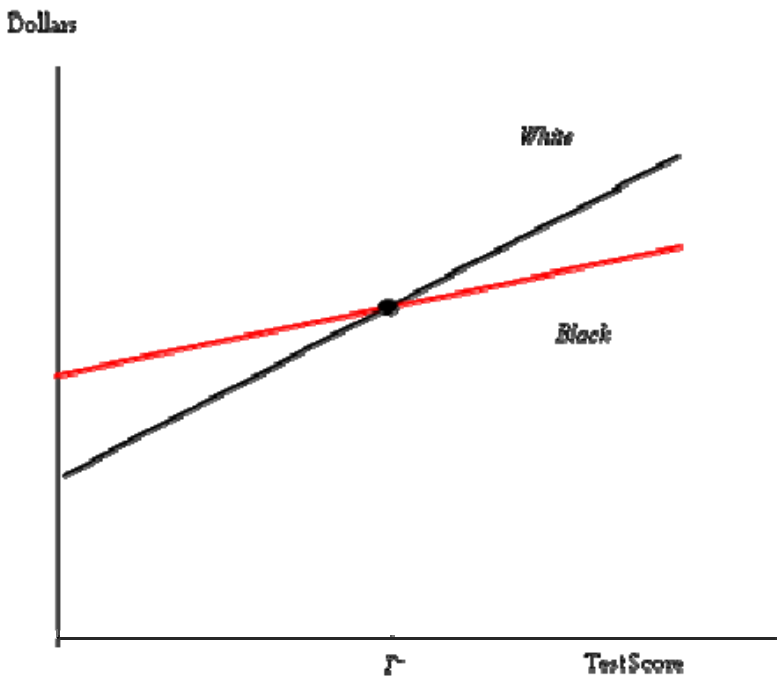
- Statistical discrimination arises because the information gathered from the resume and the interview does not predict perfectly the applicant's true productivity.

- The uncertainty encourages the employer to use statistics about the average performance of the group to predict a particular applicant's productivity.

[Figure 2] The Impact of Statistical Discrimination on Wages



(a) Whites have higher average score



(b) Test is better predictor for white workers

Measuring Discrimination

- One possible measure of discrimination is the difference in mean wages
  → wage differentials between male and female workers $\Delta\overline{W} = \overline{W_M} - \overline{W_F}$

- A better measure would compare the wages of equally skilled workers.

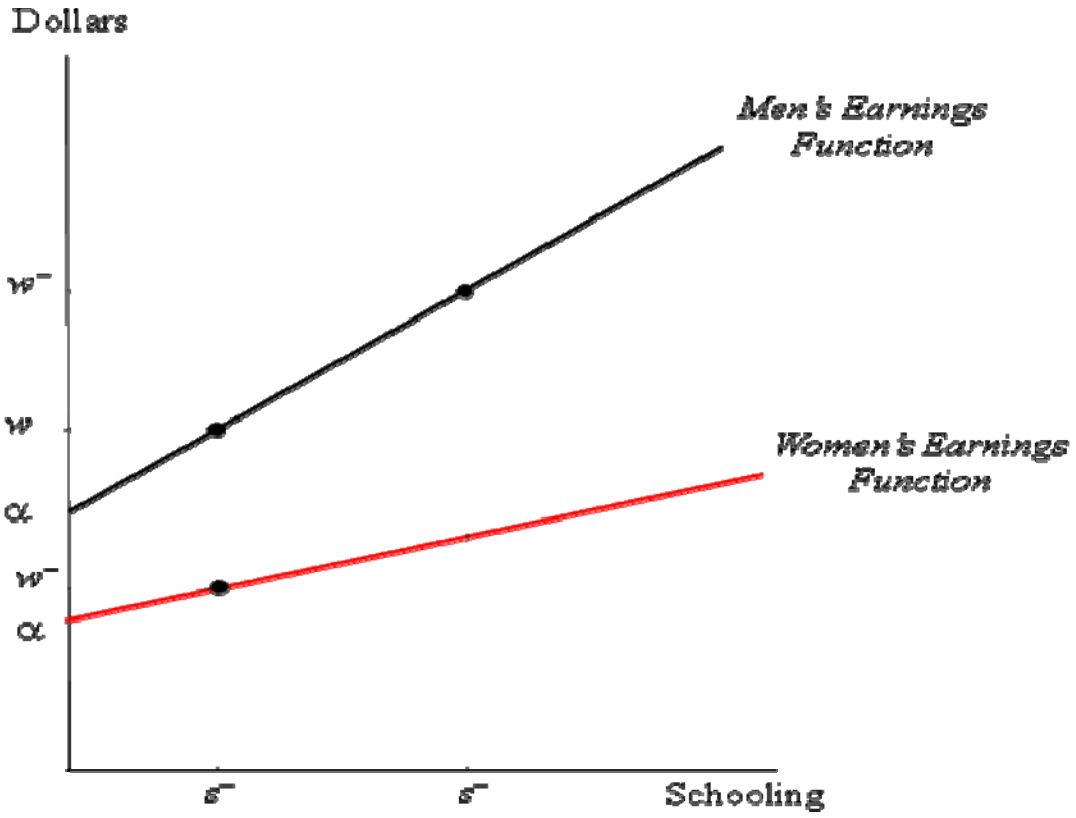
- Oaxaca decomposition: a technique that decomposes the raw wage differential into a portion related to a difference in skills and a portion attributable to labor market discrimination.

- Suppose that male wage equation is $W_M = \alpha_M + \beta_M s_M + \varepsilon_M$ and female wage equation is $W_F = \alpha_F + \beta_F s_F + \varepsilon_F$

- β_M tells us by how much a man's earnings increase if he gets one more year of schooling, while the coefficient β_F gives the same statistic for a woman.

- If employers value the education acquired by women as much as they value the education acquired by men, these tow coefficients would be equal → difference in these coefficients is a key source of discrimination in the labor market.

[Figure 3] Measuring the Impact of Gender Discrimination on the Wage



- Raw wage differential between gender groups can be written as:

$$\Delta\overline{W} = \overline{W_M} - \overline{W_F} = \alpha_M + \beta_M \bar{s}_M - \alpha_F - \beta_F \bar{s}_F \qquad (1)$$

- Adding and subtracting the term $\beta_M s_F$ to the equation (1) leads to:

$$\Delta\overline{W} = (\alpha_M - \alpha_F) + (\beta_M - \beta_F)\bar{s}_F + \beta_M (\bar{s}_M - \bar{s}_F)$$

- Differential due to discrimination is $(\alpha_M - \alpha_F) + (\beta_M - \beta_F)\bar{s}_F$

- Differential due to difference in skills is $\beta_M (\bar{s}_M - \bar{s}_F)$

Potential Problem with the Oaxaca Decomposition

- If there are some skill characteristics that affect earnings but are left out of the regression model, we will have an incorrect measure of labor market discrimination.

- In fact, we seldom observe all the variables that make up a worker's human capital stock.

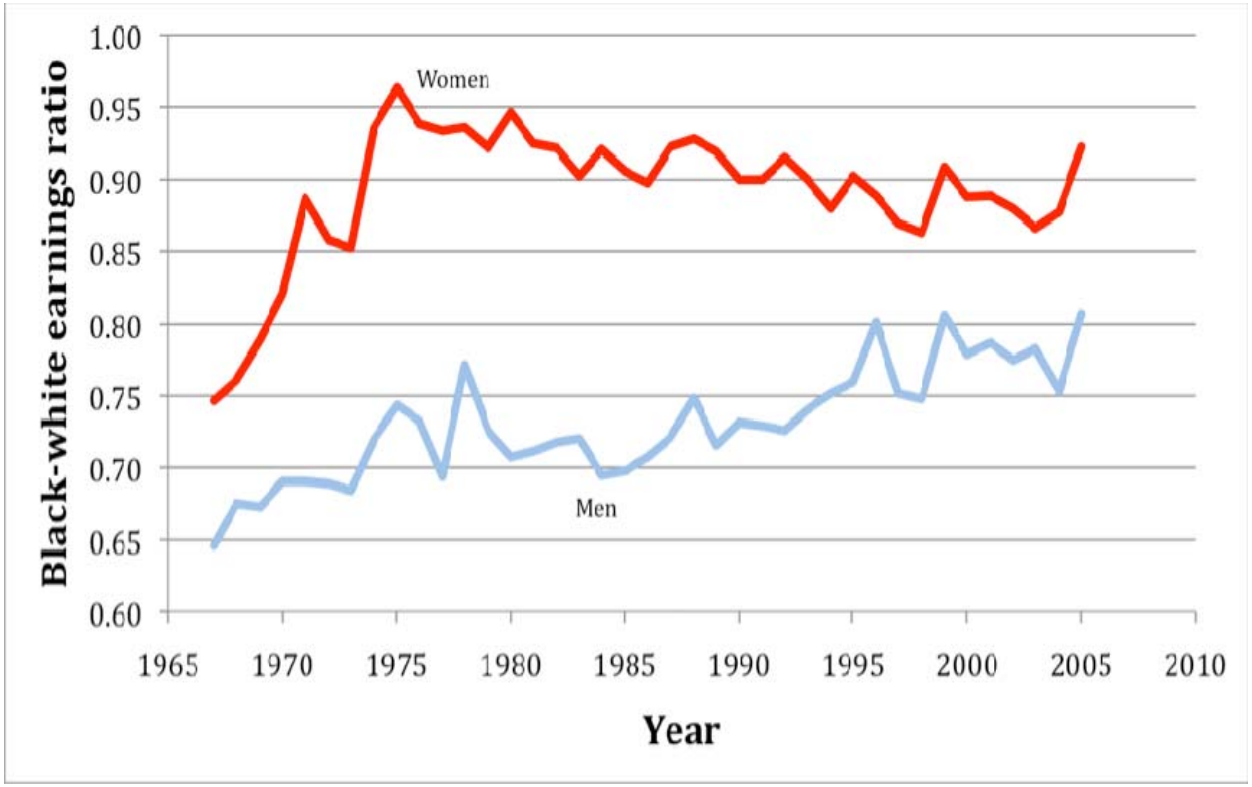
- Other factors, such as innate ability, motivation, and effort, differ between the groups.

- $\Delta\overline{W} = (\alpha_M - \alpha_F) + (\beta_M - \beta_F)\bar{s}_M + \beta_F(\bar{s}_M - \bar{s}_F)$ → selection of coefficients

The Oaxaca Decomposition of the Black-White Wage Differentials, 1995

	Controls for education, age, sex, and region	Additional controls for Occupation and Industry
Raw Log Wage Differentials	-0.211	-0.211
Due to difference in skills	-0.082	-0.114
Due to discrimination	-0.134	-0.098

[Figure 4] The Trend in the Black-White Earnings Ratio, 1967-2005



[Figure 5] The Decline in the Labor Force Participation of Blacks and the Average Black Wage