Distribution of annual earnings for all adults ages 23-62, by sex and race.

Economic models posit that differences in earnings between groups might be due to differences in education, work experience (or age), location (e.g. pay is lower in the South), family background, hours worked per year (differences in either weeks per year or hours per week), and discrimination.
Changes between 1964 & 2004:

Differences between groups have diminished (but not disappeared).
Increasing diversity in the high-earning tail of the distribution.
Large increase in overall dispersion of earnings.

Questions Raised:
Did changes in the legal environment lead to the observed changes?
Would things change back if the laws were reversed?
Are the remaining differences between groups due to remaining discrimination?

What is the effect of discrimination on labor market outcomes?

Human Capital Model

\[ \ln(\text{Hourly Earnings}) = c_0 + c_1 \times (\# \text{ years education}) + c_2 \times (\# \text{ years work experience}) + c_3 \times (\text{hardworking}) + c_4 \times (\text{follows directions}) + c_5 \times (\text{really smart}) + c_6 \times (\text{communicates well}) + c_7 \times (\text{leadership skills}) - c_8 \times (\text{non-pecuniary benefits}) + d \times (\text{demographic group}) \]

Human Capital Approaches

Measure productive characteristics & job preferences as well as possible

Audit studies

Limitations of both: There could still be an omitted variable.

(More on this next week)

Does \( d = 0 \)?
**Measurement:**

Wage = hourly earnings

Wage Gap = difference in hourly earnings not explained by observable human capital variables

Example: If female graduates of the busecon program earn 90% as much as male grads with the same GPA, the gender wage gap is 10%.
(Note: this is only an example—I don’t know whether there is actually any gender wage gap for this group).

**Measurement Issue:**

Gap in wages vs. Gap in annual earnings

(Are differences in hours/week and weeks per year due to preferences, or due to involuntary unemployment/underemployment?—this will depend on the group you are studying & the social context)

Blau, Ferber & Winkler on Discrimination

(The Economics of Women, Men & Work is the Most Widely Used Textbook on the Topic)

Gary Becker “taste for discrimination” model

e.g. if an employer experiences “psychic cost” d when he hires women, he will only hire a woman if her productivity is at least equal to her pay PLUS d

IF ALL employers feel this way, women will earn less than equally productive men

IF ONLY A FEW employers feel this way, women can find jobs with the other employers, and will be paid what they are worth

(Under this model, an audit study might see evidence of discrimination, even though discrimination is not leading to lower pay for women who search for the best paying job)

Going back to the case where ALL employers have a taste for discrimination. In equilibrium, women will earn less than equally productive men. Gary Becker argues that a nondiscriminatory employer could produce as much at lower cost, and would therefore be more successful.

(Under this model, the nondiscriminatory employer enters, pays women a bit more than other employers would, but less than what men earn. Others will enter until women’s wages are bid up to the same level as equally productive men. This model is similar to the supply and demand
model: when prices are out of equilibrium, excess demand puts upward pressure on prices until equilibrium is restored).

This kind of pressure is most likely in a highly competitive product market.

Other models of discrimination:

**Employee discrimination** (employers may be able to pay lower wages by keeping employees happy in other ways)

**Customer discrimination** (employers may be able to charge more for a product if they keep customers happy in other ways)

**Statistical discrimination** (it might be costly for an employer to learn an individual’s true productivity, leading the employer to make assumptions based on group averages)

Barbara Bergman’s crowding model:

If women are disproportionately encouraged to pursue careers in teaching (for example), the excess supply might lead to lower pay in that profession.

This can be seen as pre-market discrimination (leading women to pursue less remunerative career paths) or could be the result of gender differences in preferences (leading to higher non-pecuniary benefits).
Definitions & ideas to know before the final (not necessarily right now):

- Labor Force Participation
- Labor Market Experience (or Work Experience)
- Labor Force Attachment
- Tension between protective legislation and legislation to ensure equality
- Cohort
- Job Ladders
- Institutions
- Wage Ratio vs. Wage Gap
- Counterfactual
- Income
- Salary
- Annual Earnings
- Weekly Earnings
- Hourly Earnings (wage)
- Sex vs. Gender
- Compensating Differentials
- Productive Labor vs. Reproductive Labor
- Wage Discrimination
- Statistical Discrimination
- Crowding
- Omitted Variable Bias & Selection Bias