

4626- Economics of Inequality and Discrimination- Midterm Exam #2 Solutions

Class Distribution:

A: 88-100 21% of exams

B: 70-87 45% of exams

C: 50-69 28% of exams

D:30-49 7% of exams

Please note: If you would like me to reconsider some aspect of the grading of your exam, you must submit a written request along with your exam no later than Mon, Nov 13.

1) Consider the model of employee (co-worker) discrimination. Suppose in a town there is a segregated all-white factory that pays \$10 an hour and an integrated factory that pays \$15 an hour (ignore the issue of how the integrated factory can stay in business). Which white workers will work at the segregated factory and which white workers will work at the integrated factory?

Be Specific

Individual works for the segregated factory if $15(1-d) > 10$. So, work for segregated factor if $d > 1/3$. Work for integrated factor if $d < 1/3$. Indifferent if $d = 1/3$.

2) Chinese and Japanese Americans have average earnings that are equal to, or above, those of white Americans. Does this fact imply that workers from these ethnic groups do not experience labor market discrimination? Why or why not?

We do not know from these statistics whether or not Asian Americans experience labor market discrimination, because we do not have information on productivity. It is possible that the average Asian American has more education and higher productivity than the average white American. Because labor market discrimination is defined as paying different compensation to equally productive workers, what we need to know is whether equally productive white and Asian workers receive equal compensation. If Asian Americans are on average more productive than whites, is possible that Asian Americans receive higher pay on average, but they are still under-compensated compared to equally productive white workers. (Much like the baseball card study we did in class).

Note: It was not sufficient to merely mention that Asian Americans have higher education. Only answers that related this fact back to the definition of discrimination received full credit on this question.

3) Suppose two white men apply for jobs at a prestigious law firm in New York City. They have comparable qualifications in terms of the competitiveness of their law school, their class rank and GPA, their work on their school's law review, and so forth. One speaks with a Boston accent and one speaks with an Alabama accent. Give two different reasons, based on models that we discussed in class, that these two applicants may be treated differently in the hiring process. *Keep your discussion brief.*

Most students answered with 2 of the following three explanations: statistical discrimination (people with accent X typically have characteristics Y), customer discrimination (clients will be more/less comfortable with a lawyer from X), employer/employee discrimination (people in the firm don't like people from X). Some examples:

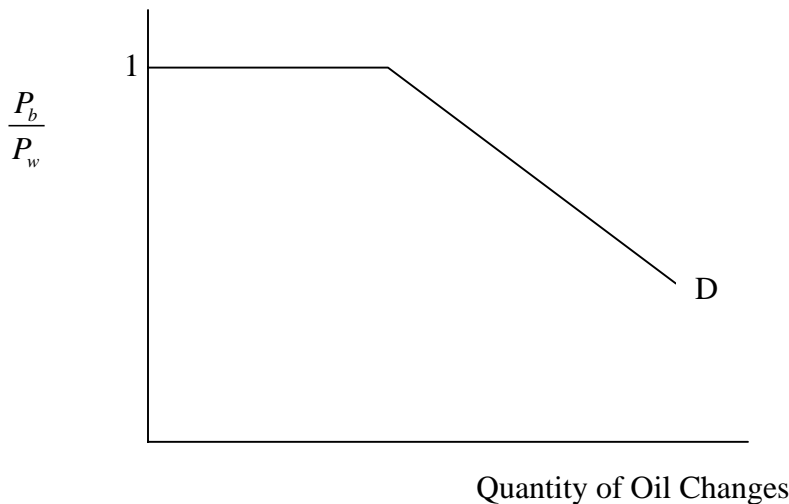
Statistical discrimination: The firm might have developed a belief over time that applicants from the south on average come from a lower quality educational background or are less likely to be comfortable with the diverse racial/ethnic/religious mix of co-workers and clients they will encounter in NYC.

Employer/Employee Discrimination: People in the NYC firm don't like interacting with Southerners or Boston Red Sox fans. They receive a disutility from hiring/working with individuals from Alabama/Boston.

4) Consider a system of labor regulations in which women are not allowed to work in any job that requires substantial physical effort, substantial risk of physical injury or death, that involves work past 6 pm, or involves more than 45 hours of work a week. "Unpleasant" Jobs with these characteristics can only be filled with male workers. Graphically analyze the consequences of such a system of regulation for male and female wages.

This legislation restricts access of female workers to "unpleasant jobs" reducing supply of labor to the "unpleasant job" market, increasing "unpleasant job" wages. Likewise women are crowded into the "pleasant job" market, increasing labor supply and lowering "pleasant job" wages. Because men will have access to the unpleasant job sector, which now has higher wages, and women will be confined to the pleasant job sector, which now has lower wages, the wage gap between men and women will increase.

5) Consider the customer discrimination model and the example of competing garages, some with a white mechanic and some with a black mechanic. On the form provided below, graph the demand curve for oil changes as a function of $\frac{P_b}{P_w}$, where P_b is the price charged for an oil change at a garage with a black mechanic and P_w is the price charged for an oil change at a garage with a white mechanic. Briefly discuss your graph.



The flat portion of the demand curve reflects the $d=0$ customers who will be willing to purchase an oil change at the garages with black mechanics even if the price is the same as at the garage with the white mechanic. The sloped portion of the demand curve reflects the fact that in order for more oil changes to be sold, there must be an increasingly large price gap that compensates positive- d customers for their disutility from purchasing the oil change from a black mechanic.

6) A recent study by a professor at Carnegie Mellon University, found that “male graduates with master’s degrees from her university earned starting salaries almost \$4,000 higher than female students. But when asked who had accepted the initial pay offer and who had asked for more, only 7% of women, compared to 57% of men, turned out to have negotiated for higher salaries.”

Describe circumstances under which this difference in negotiation tactics *will not* result in a long-run pay difference between equally productive men and women and circumstances under which this difference *will* result in a long-run pay gap.

In the case of a competitive market with perfect information, differences in initial salary (due to differences in negotiation tactics) for equally productive workers should not result in a long-run pay difference. Under these conditions, workers will be compensated based on their productivity, and all equally-productive workers will receive them same compensation. (Women who are being paid less than their productivity should receive offers from other firms. Firms with lots of over-paid men should have trouble competing against firms with more of the lower-paid women.)

An example of how a long-run pay difference could result from the differences in negotiation style would be from the statistical discrimination model. In the case of imperfect information, firms may take your starting salary, or your salary in your previous job, as a signal of how productive you are (on average, people with higher salaries at their previous job turn out to be more productive). In this case, the pay difference will be compounded as future wage offers are higher for people that negotiated higher initial salaries.

Note: It was not sufficient on this question to merely give reasons that men and women might receive different pay. The question specifically asked for reasons *the difference in negotiation tactics* would or would not result in differential pay.