

4626- Economics of Inequality and Discrimination –Midterm Exam Fall 06

A: 90-100 (19% of exams)

B: 70-89 (35% of exams)

C: 50-69 (29% of exams)

D: 30-49 (13% of exams)

F:<30 (3% of exams)

If you want any aspect of your grade reconsidered, you must submit a written request by 10/13

1) Suppose a country of 4,000 families has the following properties:

- i) The poorest 1,000 families have an average annual income of \$5,000.
- ii) The 2,000 families in the “middle class” have an average annual income of \$10,000
- iii) The richest 1,000 families have an average annual income of \$15,000

Draw the Lorenz curve for this country. *Label all important points.*

	Income	Income Share	Cumulative Income Share
Bottom quartile	5,000,000	(5/40)=.125	.125
25 th -75 th percentile:	20,000,000	(20/40)=.500	.625
Top quartile:	<u>15,000,000</u>	(15/40)=.375	1.00
	40,000,000		

Points on Lorenze Curve: (0,0),(.25,.125),(.75,.625),(1,1)

2) The income statistics reported by the Census Bureau do not include individuals living in institutional settings (such as jails, prisons, mental hospitals and nursing homes).

a) Would the statistics show more or less inequality if these individuals were included in the calculations? Why?

Most individuals living in these types of institutional settings have extremely low annual income and would be in the very low end of the distribution even if outside the institutional setting. Therefore, statistics would probably show more inequality if they are included in the calculations.

b) Incarceration rates (meaning fraction of the population incarcerated in jail or prison) in the US are substantially higher than most other developed countries. Describe how this affects comparisons of U.S. income inequality to that of other countries.

The U.S. already has higher income inequality than most other western democracies, but this difference would be greater still if incarcerated individuals were included in the calculation of income inequality statistics. Because individual’s living in institutional settings are typically drawn from the very bottom of the income distribution, the US is essentially “hiding” part of the bottom tail of its distribution in institutional settings.

3) Below is a table that describes the growth in household income and wealth between 1962 and 1989. (In the questions below, consider the term “wealth” to refer to Marketable Net Worth, the definition of wealth used in class. *Ignore Financial Net Worth until part c).*

- a) The table indicates that in 1989, mean household income was \$41,889 and mean household net worth was \$198,639. Mean income and mean net worth would be
(Circle one) higher lower
if the unit of observation was a family rather than a household.*Explain Why.*

Higher. There are family households (2 or more related individuals sharing a residence) and there are non-family households (individuals living alone or with non-relatives). By switching from households to families, we exclude the people living alone and people living with non-relatives (such as a roommate). Individuals living alone or with roommates tend to be either relatively young or old (students, widows, etc), and therefore tend to have low incomes and, in the case of the young, low wealth. Earners in family households tend to have higher income and

wealth than earners in non-family households. Furthermore, while there are two-earner non-family households and single-earner family households, family households are more likely to have multiple earners.

b) From this table, what can you say about changes in income and wealth *inequality* between 1962 and 1989? **Because mean wealth is growing faster than median wealth, we know wealth inequality is increasing. Likewise, because mean income is growing faster than median income, we know income inequality is increasing.**

c) We learned in class that wealth share of the wealthiest 1 percent is 33.4%, when marketable net worth is used as the measure of wealth. Financial net worth is marketable net worth minus the value of real estate (homes and property). Using financial net worth as the measure of wealth, the wealth share of the wealthiest 1 percent would be: Circle one: Greater Less than 33.4%. *Explain why.*

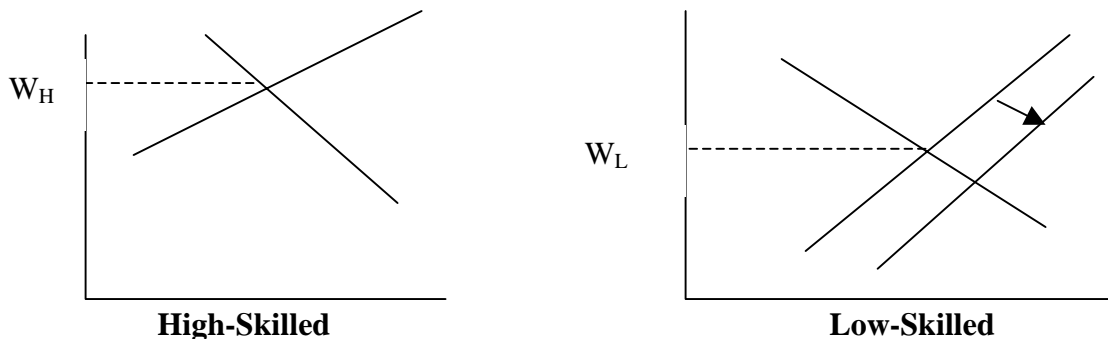
Greater. A relatively small share of the wealth of the very wealthy is in real estate. A very large share of the wealth of the middle class is in real estate. Therefore, if we exclude real estate from our measure of wealth, wealth becomes more concentrated in the hands of the very wealthy.

4) Consider in case in which the U.S. has a relative abundance of skilled labor while a potential trading partner has a relative abundance of unskilled labor. Suppose trade barriers are reduced between the U.S. and this trading partner. What do you expect to happen to income inequality in the trading partner? *Explain why.*

The trade allowed between the two countries, the trading partner will specialize in goods intensive in unskilled labor and import goods intensive in skilled labor. As a result, demand increases for unskilled labor and demand decreases for skilled labor. The unskilled wage increases and the skilled wage decreases. Income inequality decreases.

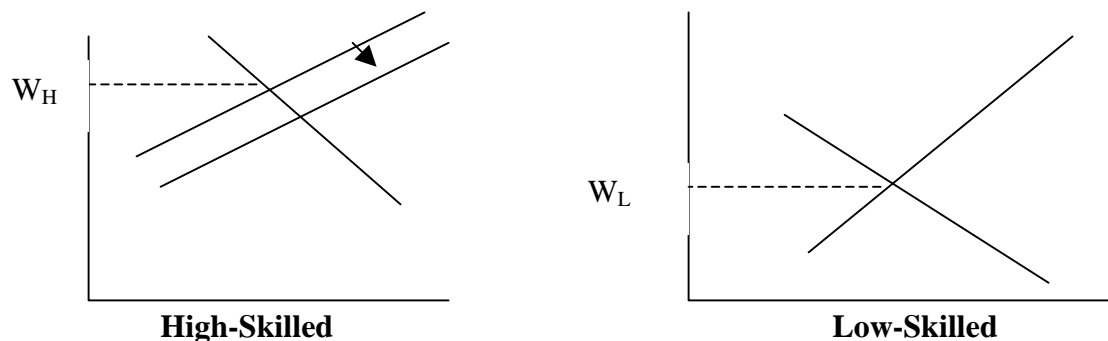
5) During the mid 1990's, there was a tremendous amount of attention devoted to developing policies that would encourage low-income single mothers to leave welfare for work. Two competing policies were debated. On one side were those that wanted to put in place restrictions on welfare use that immediately forced welfare recipients to leave welfare and enter the labor market. On the other side were those that wanted to put in place education and training programs to increase the skills of current welfare recipients so that they would be qualified for higher-skilled jobs.

a) Graphically analyze the consequences of the first policy (regarding restrictions on welfare use) for income inequality. Discuss and explain your graphical results.



By forcing a large group of low-skilled workers into the labor market, this policy will increase supply of low-skilled labor, lowering the market wage for low-skilled workers and increasing the wage gap between high-skilled and low-skilled workers.

- b) Graphically analyze the consequences of the second policy (regarding education and training) for income inequality. Discuss and explain your graphical results



By moving welfare recipients into higher-skilled jobs, this policy would increase the supply of high-skilled workers, lowering the market wage of high-skilled workers and reducing the wage

- 6) Evaluate the following statement by a hypothetical (but not implausible) conservative commentator:

“The government should get out of the business of helping the poor and leave it to charitable and religious organizations. If less money is provided to the poor overall, this merely reflects the will of the people and implies that the government was previously spending more money on the poor than desired by the population at large.”

Even if people are altruistic, meaning that they gain utility from knowing that others have what they need, aid to the poor has the attributes of a public good—once the aid is provided, everyone else can experience the increase in utility at no cost. Because of the free-rider problem with public goods, we know that they are underprovided in a market economy (essentially people will hold off providing aid to the poor in hopes that someone else will provide it so they can “free ride”). This means that the drop in aid to the poor that will occur when aid is “privatized” does not necessarily indicate that the lower level of aid is the “will of the people.”