

MICROECONOMICS AND POLICY ANALYSIS - U8213
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 Class Notes - Spring 2001

Income Inequality and Discrimination

Monday, February 12

Reading: Ehrenberg, chapters 8, 12, 15

Equality

Who is rich and who is poor in the economy?

1998 Percentile	Household Earnings
20%	\$16,160
95%	\$132,199

If everyone had the same income all the percentiles would be equal.

Information is available at www.census.gov.

Has inequality increased?

One way to see if inequality has increased or decreased is to compare the ratio of different percentiles at different times.

Larger ratios represent larger income disparity:

$$\left. \begin{array}{l} \frac{95\%}{20\%} = 8.2 \text{ in } 1998 \\ \frac{95\%}{20\%} = 6.2 \text{ in } 1970 \end{array} \right\} \begin{array}{l} \text{The increase in the} \\ \text{ratio since 1970} \\ \text{indicates that} \\ \text{inequality is increasing} \end{array}$$

Reading - Chapter 15 (Inequality in Earnings)

Men

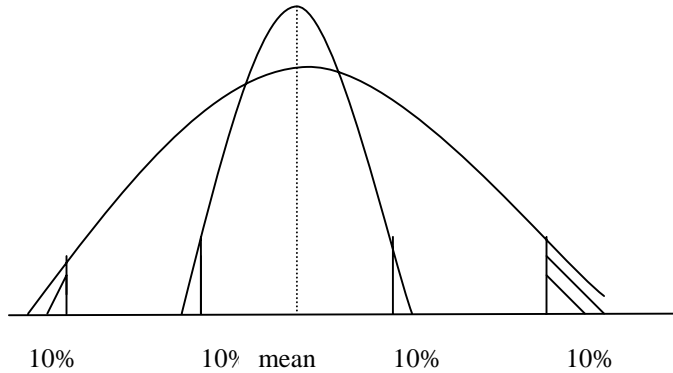
$$\frac{90\%}{10\%} = 4.95 \text{ (1975)}$$

$$\frac{90\%}{10\%} = 7.31 \text{ (1990)}$$

We care about income inequality because there is a social welfare function.

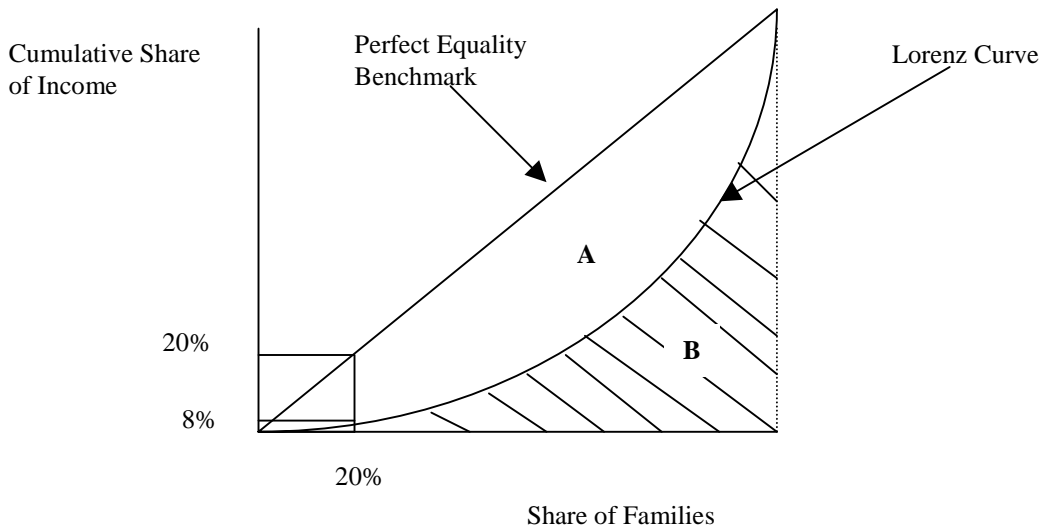
How to measure income inequality

1. Compare ratios in the percentiles of income distribution (see above)



The higher the ratio the greater the inequality. Need to look at which of the numbers are moving around. Now, the upper end of the distribution is expanding.

2. The Lorenz Curve



Gini coefficient: The measurement of inequality derived from the Lorenz curve.

The area between the diagonal and the Lorenz curve $\rightarrow \frac{A}{A + B} \leftarrow$ The entire area under the diagonal

The Gini coefficient is between zero and one. If the Gini coefficient is zero the Lorenz curve is the same as the benchmark which represents perfect equality.

If the Gini coefficient is 1 there is no area under the Lorenz curve and there is complete inequality.

If the Gini coefficient is .5 the area under the Lorenz curve is .25. This is the medium level of inequality.

In 1970 the Gini coefficient in the U.S. was 0.39. In 1998 the Gini coefficient in the U.S. was 0.456.

Why have there been increases in inequality?

Explanation	Plausibility
Perhaps the distribution of occupations has changed. Middle income jobs have maybe moved to lower or higher paying jobs.	Not supported by data.
Perhaps there are changes in relative wages. For example returns to schooling may have increased.	This is a partial explanation.
Perhaps wages are the same but there have been changes in the number of hours worked.	Not persuasive.
Perhaps the variability within certain age and education groups has increased. What accounts for the variability? One possibility is that as supply increases wages decrease and the level of employment increases	Evidence does not support this.
Another, plausible explanation is that there are changes in demand for workers. Skill biased technology changes increase the demand for skilled labor. This explains the increased premium on education and explains why the demand for less-skilled labor has declined	This can be supported with evidence