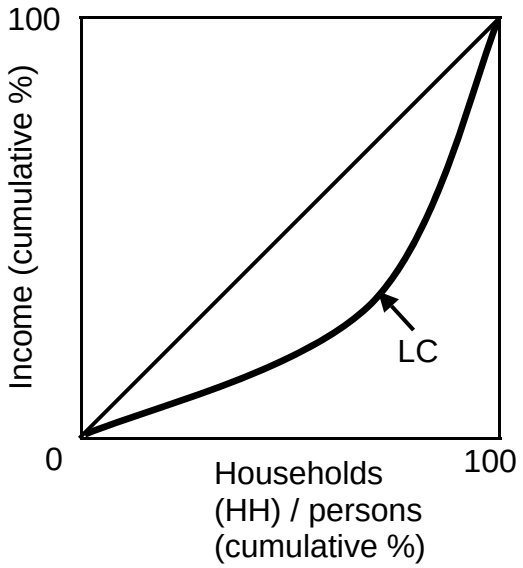
Lorenz Curve and Gini Coefficient

1 Lorenz curve (LC) and income distribution

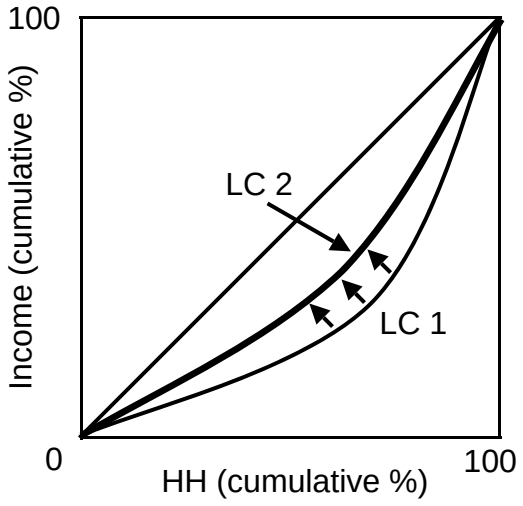


Explanations

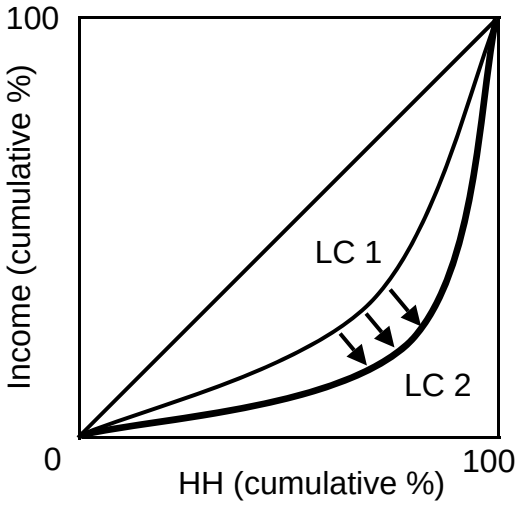
- X-axis: Households/persons are arranged in ascending order of income (cumulative percentage).
- Y-axis: Income (cumulative percentage)
- The diagonal (45^{o}) displays totally equal distribution.
- The closer the Lorenz curve lies to the diagonal, the more equal income is distributed.

2 Redistribution by the Government

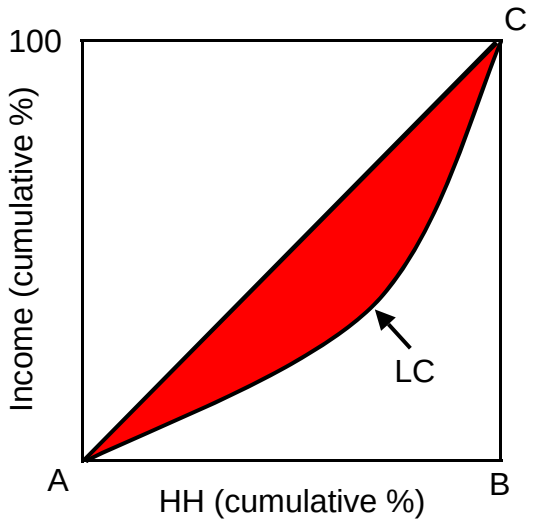
21 From rich to poor (for ex. by progressive taxes)



22 From poor to rich (for ex. by regressive taxes)



3 The Gini coefficient (GC) as a measure of (in)equality



Explanations

- Gini coefficient =

$$\frac{\text{Area between the diagonal and the LC (coloured)}}{\text{Total area under the diagonal (= ABC)}}$$

- The GC has a value between 0 and 1. The bigger it is, the more unequally income is distributed.
- **Special cases**
  GC = 0 → totally **equal** distribution
  GC = 1 → totally **unequal** distribution