

# Unidimensional Poverty using STATA

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# STATA: From Yesterday

From lecture “**Problem Set on Unidimensional Poverty Measurement**”

Exercise (3): Consider the following three distributions:  $x=(3, 6, 9, 30)$ ,  $y=(3, 8, 9, 31)$ , and  $u=(4, 5, 9, 30)$ . Now using STATA:

- a. Calculate the headcount ratios for  $x$ ,  $y$ , and  $u$  if  $z = 10$ .
- b. Calculate the poverty gap ratios for  $x$ ,  $y$ , and  $u$  if  $z = 10$ .
- c. Calculate the squared poverty gaps for  $x$ ,  $y$ , and  $u$  if  $z = 10$ .
- d. Draw the cumulative distribution functions (CDF)

## Hints:

EXPLORE THE DATA FIRST (dataset suman.dta)

First, create a new variable that represents the poverty line ( $z=10$ )

Then, create a dummy variable that shows who are poor and who are not

Then obtain  $g_i^* = (z - x_i^*)/z$  and finally the squared poverty gap

# STATA: From Yesterday

From lecture “**Problem Set on Unidimensional Poverty Measurement**”

Exercise (4): Consider the following two distributions:  $x = (3, 6, 9, 12)$  and  $y = (3, 6, 8, 10, 12)$ . Can you verify if one distribution has unambiguously higher poverty than another distribution if poverty is assessed by a measure that satisfies symmetry, scale invariance, replication invariance, and focus?

Use database suman2

Graph the cdf function (if you want you can correct the initial value)

# STATA: Today

Using the databa half\_sample\_butan and considering as poverty line a Per Capita Real Consumption of 1096.94 Nu per person per month, calculate the following

- a. Calculate the headcount ratio.
- b. Calculate the poverty gap ratios.
- c. Calculate the squared poverty gaps.
- d. Calculate the same for urban and Rural areas and per Region (dzongkhag)
- e. **Discuss and Interpret your regional results!!!!**  
    **Compare your results for “trashiyangtse” and “haa”?**
- f. Draw the cumulative distribution functions (CDF) for urban and rural areas
- g. Choose one region, and present your results.

Remember: YOU MUST USE WEIGHTS

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