Inequality and growth in a panel of countries. Does perception matter?

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SGH

Income inequality and economic growth

- The literature on economic growth and income inequlity is extensive…

- … but widely inconclusive

- It has been „proved" that:
  - inequality affects growth negatively (Alesina, Rodrik 1994)
  - inequality affects growth positively (Forbes 2000)
  - the relationship is non-linear (Benhabib 2003)
  - the relationship depends on the level of economic development (Barro 2000)

- The results depend on data and method used

Why do we find this problem (still) interesting?

In vino veritas

Inequality and economic growth - theory

- Inequality might affect economic growth in various ways:

  - it affects marginal propensity to save and thus capital accumulation

  - creates positive incentives

  - increases pressure on the government to redistribute of income

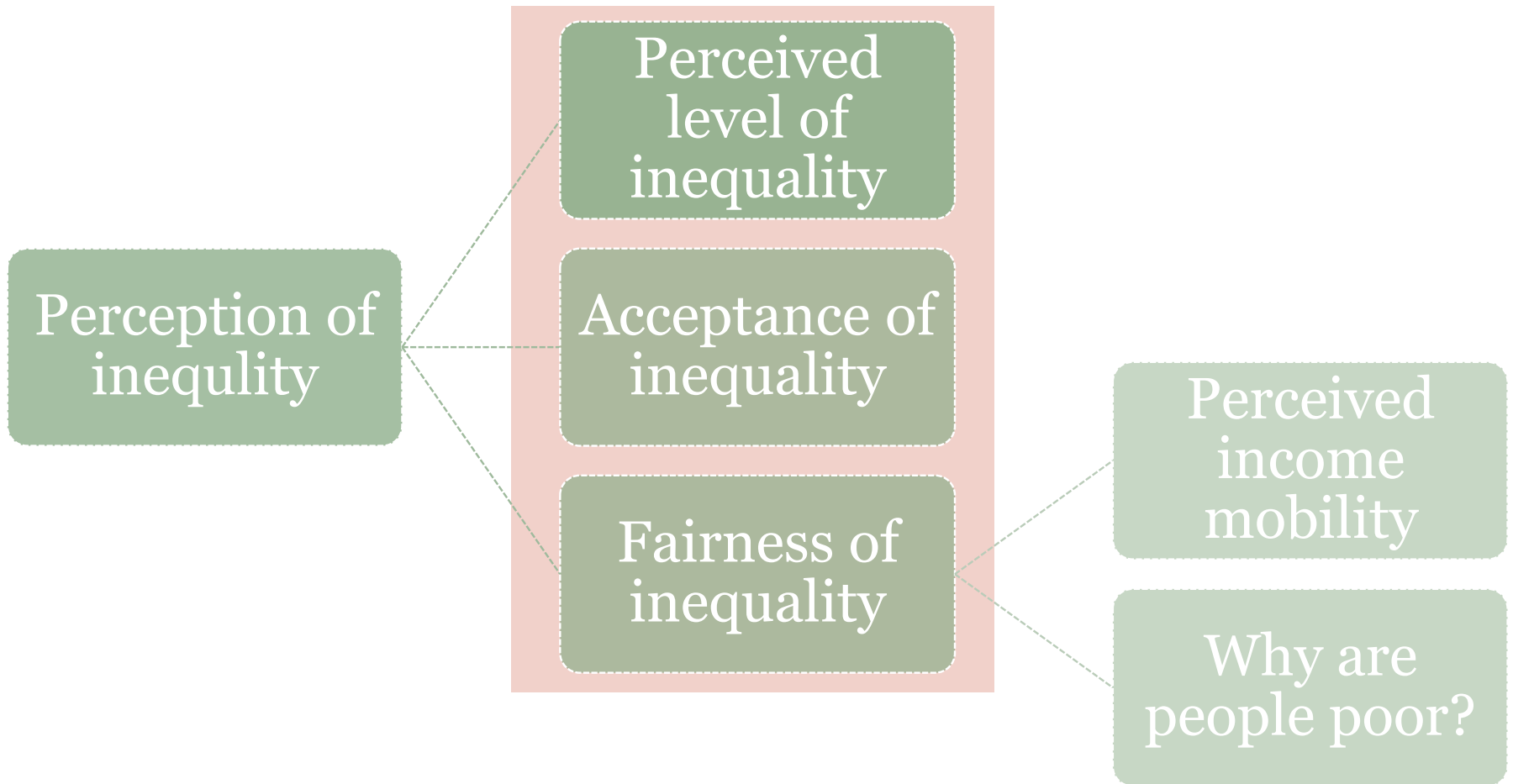 - can cause political instability

  - can fuel social conflicts

Epihany

Perception of inequlity, stupid

Perception of inequality

Perception of inequlity

Perceived level of inequality

Acceptance of inequality

Fairness of inequality

Perceived income mobility

Why are people poor?

Perception of inequality and economic growth - theory

- ## Perception of inequality might affect economic growth in various ways:

  - perception affects demand for redistribution (Piketty 1995, Cruces et al. 2011, Niehues 2014, Engelhardt and Wagener 2014, Gimpelson and Treisman 2015)

  - perception affects the political and social stability

  - perception might influence entrepreneurial behavior, capital accumulation and educational decisions

  - perception might affect the way in which actual income inequality affects growth

Acceptance	Fairness

• Question E035
    ○ Incomes should be made more equal vs. we need larger income differences
    ○ 1-10 scale
	• Question E040
	    ○ Do You agree: „Hardwork brings success"
	    ○ 1-10 scale
	 • Question E131 (WVS3)
	    ○ „Why are people in need?"
	    ○ Share of those answering „because of poor society"
	 • Question E132 (WVS3)
	    ○ „Is there a chance to escape poverty?"
	    ○ Share of those answering „Yes"

1. Replication of the Barro model

2. Adding the Gini coefficient to the model specification and estimating it with various methods

3. Replacing the Gini coefficient with perception of income inequality measures

4. Testing of interaction terms

Stage 1

- Dependent variable: *5 year avg real GDP per capita growth rate*
- Independent variables:
  - Log level of GDP per capita
  - Share of investment outlays in GDP
  - Share of government outlays in GDP
  - Rule-of-law index (World Bank)
  - Political rights (Freedom House)
  - Log level of fertility rate
  - average CPI inflation rate
  - Average years of female total schooling years (Barro Lee)
  - growth of terms of trade
- Random effects, 90 countries, 5x5year periods 1990-2014

- Dependent variable: *5 year avg real GDP per capita growth rate*
- Independent variables:
  - **Log level of GDP per capita (+)*****
  - **Share of investment outlays in GDP (+)*****
  - Share of government outlays in GDP
  - **Rule-of-law index (+)****
  - Political rights
  - **Log level of fertility rate (-)*****
  - average CPI inflation rate
  - **Average years of female total schooling years (+)***
  - **growth of terms of trade (+)*****

Stage 2

- Gini coefficient not statistically significant in:
  - GOLS estimation with bootstrapped standard errors (RE)
  - GOLS estimation with robust standard errors (RE)
  - ML estimation with bootstrapped standard errors (RE)
  - AB (GMM) estimation with lagged dependent variable (RE)
  - GOLS estimation with bootstrapped standard errors (FE)
  - AH (Nickel-bias correction) estimation with lagged dependent variable (FE)

- Gini coefficient statistically significant in:
  - System GMM estimation with lagged dependent variable (RE)
  - **Negative impact**

Was Piketty right (again)?

- Analysis only for time invariant perception measures (country average over all waves)

- One measure is statistically significant:
  - Share of people agreeing that there is a chance to escape poverty in their society influences positively economic growth (variable E132)
  - result robust to estimation method (even stronger evidence in in the GMM specification) and country coverage

- ERGO: Perceived fairness (social mobility) positively impacts economic growth

- Interaction variables. We tested 4 indirect channels:
  - **Perception** & **Government expenditures**
    - medium evidence in favor of fairness interaction variable (E131)
  - **Perception** & **Schooling**
    - weak evidence in favor of fairness interaction variable (E131/E132)
    - strong evidence in favor of acceptance interaction variable (E035)
  - **Perception** & **Rule-of-law**
    - weak evidence in favor of acceptance interaction variable (E035)
  - **Perception** & **Actual inequality**
    - no statistically robust evidence

Problems

- Highly unbalanced panel
  - almost impossible to test the time dimension of inequality perception
- Imperfect measures of inequality perception
- Endogeneity – might someone would like to test with me?

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