# Dimensions of inequality: Concepts and Theory

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# Overview

- Definitions
  - Income
  - Inequality
  - Decomposability
- Why focus on inequality?
  - Moral arguments
  - Economic arguments
- Inequality traps and inter-generational persistence
- Conclusion

# Conceptual issues

- What do we mean by Inequality?
  - Of what:
    - Income, power, education, land, assets?
  - Amongst whom:
    - SA citizens, SA residents, men and women, races, old and young, households or individuals?
  - Over what time period:
    - A week, month, year, lifetime, dynasty?
  - We are focussing on <u>income inequality</u>, although many of our analyses focus on other dimensions of inequality to better understand income inequality.

# Inequality

- By “inequality” we mean the dispersion or spread or variance in some variable. So income inequality is about how widespread the distribution of income is. Intuitively, two things matter:
  - How much more income the rich have relative to the middle classes, and how much more the middle classes have relative to the poor.
    - If the rich are very rich, or the poor are very poor, then inequality is higher (other things being equal)
  - How big are the different classes, relative to each other.
    - If the middle class is larger then inequality will be lower in general.

# Defining income

- Comprehensive definition of income: "The maximum amount of resources a HH could use for consumption while holding its net worth constant"
  - Value of public services – could be added to HH disposable income to get "HH extended income". This matters when we think of the progressivity of fiscal policy.
- So income inequality is about the distribution of income, among <u>members</u> of a <u>group</u>, within some interval of <u>time</u>.

# Empirically estimating Income

- From Atkinson (2015):
  - "Household market income"
    - Sum of all individual earnings
    - Capital income (eg. Rent, interest)
    - Private transfers
  - <u>Plus</u> State transfers

  = "HH gross income"
  - <u>Less</u> Direct taxes

  = "HH disposable income"
  - <u>Divide by</u> # of equivalent adults

  = HH equivalised disposable income

- So changes either distribution of assets or returns on assets, in any sub-component, will change inequality.

# Why focus on inequality?

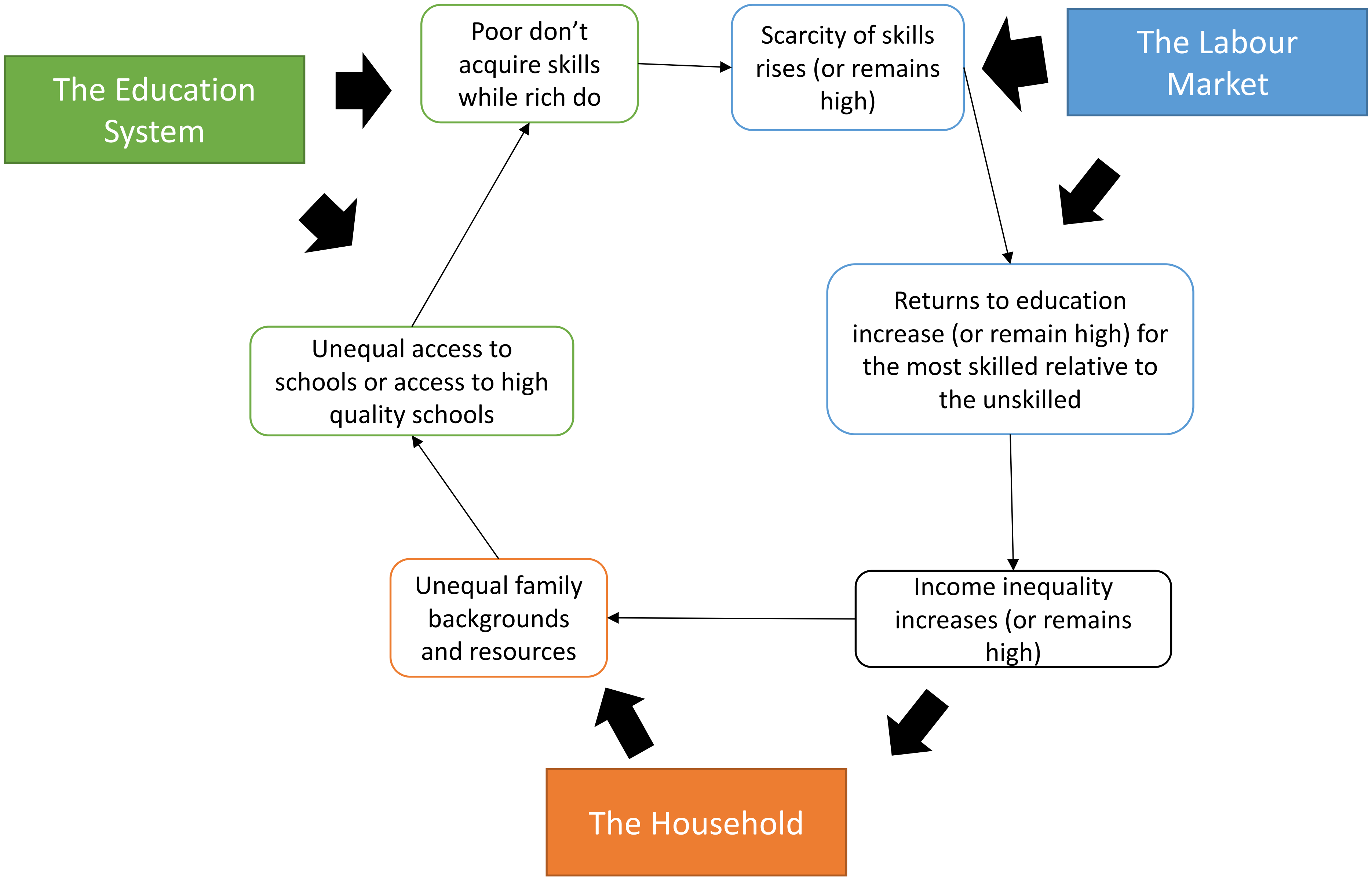
- Moral arguments
  - High inequality violates our sense of fairness.
  - Super high earners (possibly) don't deserve to have so much.
  - How can we justify obscene salary when 50% of country lives in poverty?
- Growing recognition that **high levels** of inequality reduce growth, limit human development, make the economy less efficient, make societies less stable, induce health problems amongst **all** members of the society, and potentially lead to political instability.

# Definition: Inequality Traps

Inequality trap:

- Situation of high inequality,
- Where the poor are unable to participate in profitable investments due to income and credit constraints,
- And the small group of rich people can and do invest,
- And this scarcity of investments means the poor stay poor and the rich stay rich,
- Resulting in <u>persistence</u> of the high inequality.
- Can be inter-generational but not necessary.

# Inequality trap in Education



## The Education System

*Factors affecting educational outcomes (e.g. access and skill acquisition)*

- Resources
- Teachers and Managers (ability and effort)
- Other factors

## The Labour Market

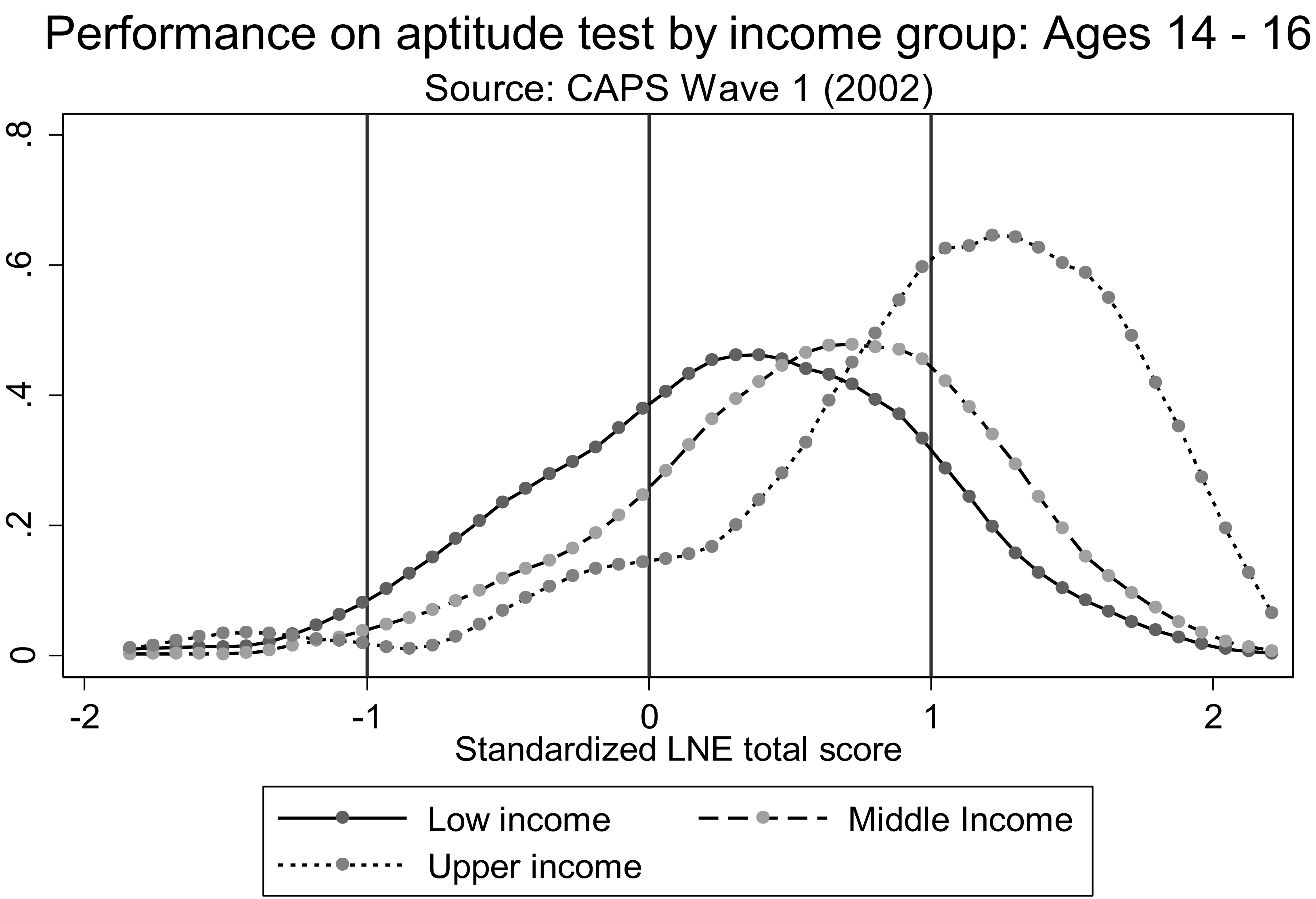
*Factors affecting wages and employment rates*

- Technology
- Globalisation, competition, demand
- Growth
- Legislation / regulation
- Unions
- Monopolies and rent-seeking
- Informal sector and entrepreneurship
- Social norms of fairness
- Discrimination
- Access to credit
- Skill deterioration (LR unemployment)

## The Household

*Factors affecting inequality other than education and the labour market*

- Non-market income
  - Social grants, remittances, etc
- Parents and family
  - Presence, involvement, ECD, networks, safety nets
- Neighborhoods and segregation
  - Social capital (trust), crime, resources
- Psychological
  - Role models, peer effects, stereotypes


Performance on aptitude test by income group: Ages 14 - 16
Source: CAPS Wave 1 (2002)
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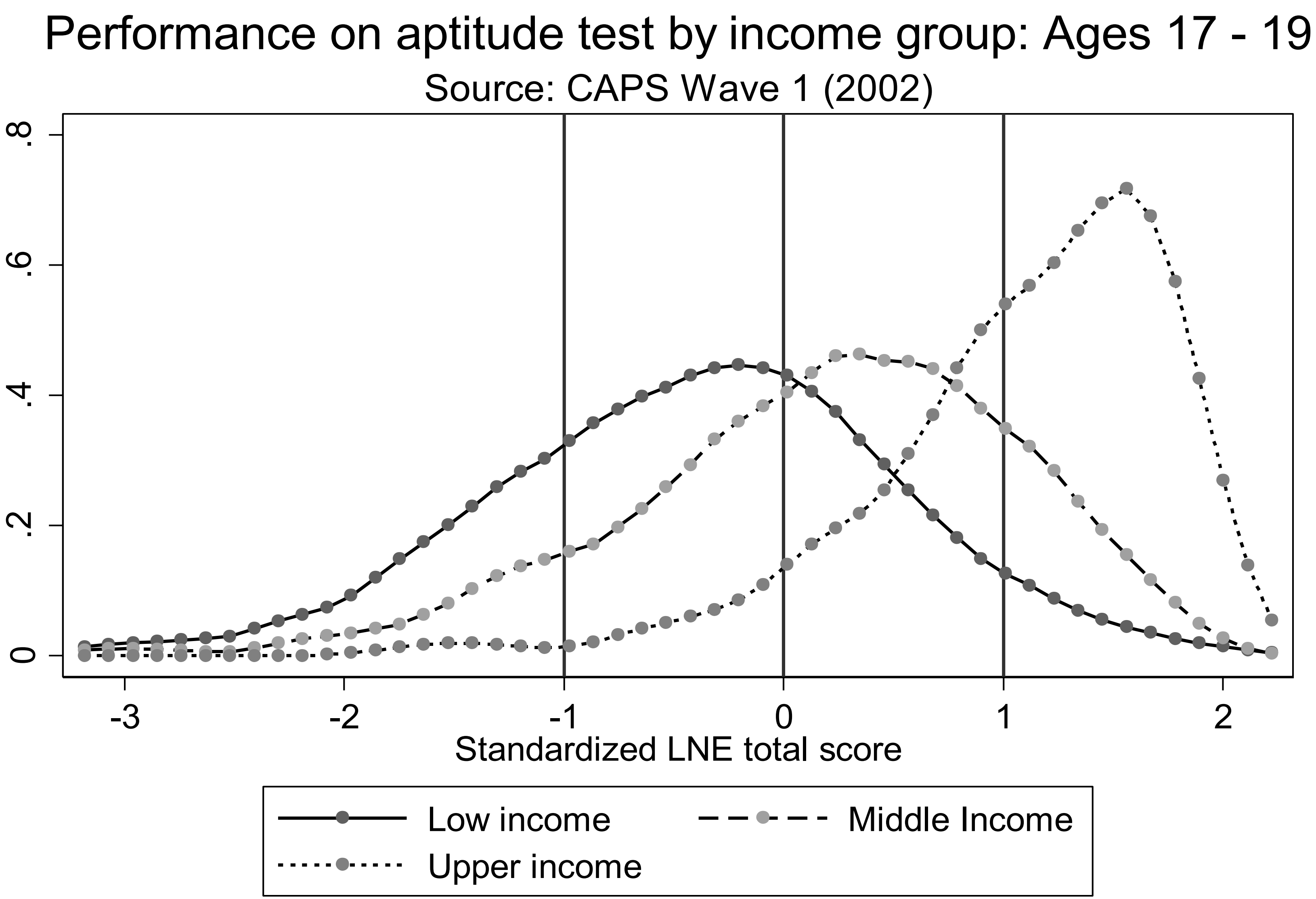
.6
.8
-2
-1
0
1
2
Standardized LNE total score
Low income
Middle Income
Upper income



Performance on aptitude test by income group: Ages 17 - 19
Source: CAPS Wave 1 (2002)
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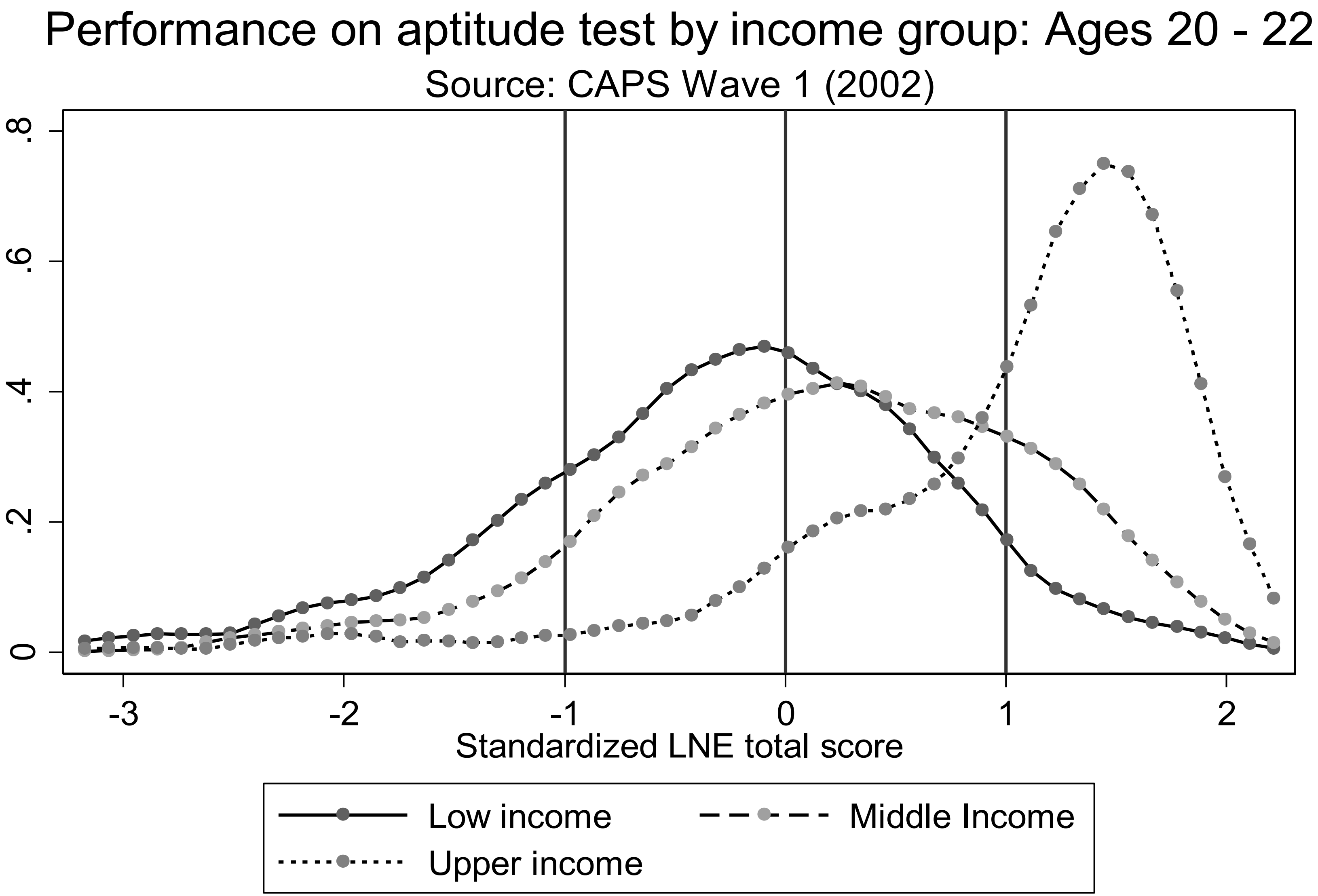
Standardized LNE total score
Low income
Middle Income
Upper income


Performance on aptitude test by income group: Ages 20 - 22
Source: CAPS Wave 1 (2002)
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-1
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2
Standardized LNE total score
Low income
Middle Income
Upper income

# Conclusion

- Income inequality is an intuitively simple concept but empirically quite complex.
- Income is aggregated over sub-components derived from different types of assets/capital. To raise income, either we need more assets or we need better prices for existing assets.
- A direct way to reduce inequality is to tax the rich and transfer to the poor.
- Alternatively, we need to poor to get more assets or better returns on the assets poor people hold, and/or we need the rich to have less asset holdings or earn a lower return on their existing assets.