The Median Is the Message: A Better Measure of Development

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Three points about survey-based median household consumption

- Simple and understandable
- Durable over time and across countries
- Good enough measure of inequality
The median: simple, and reflects the poverty rate and much more

The median is simple, and reflects the poverty rate and much more. The median is the middle value of a set of numbers, and it is not affected by extreme values. It is a measure of central tendency that is less affected by outliers than the mean. The median is particularly useful when dealing with skewed distributions, as it provides a more accurate representation of the typical value in the data set.
The median: simple, and reflects the poverty rate and much more

Median consumption, daily p.c. (2005 PPP$)

$2 a day poverty line

developing country median (estimate)
The median: in the developing world still below a $10 PV line
A durable measure of development

Median consumption, daily p.c. (2005 PPP$)

GNI per capita (current US$)

Lower middle income

Upper middle income

Russia

Poland

Brazil

South Africa

India

China

Russia

Poland

Brazil

South Africa

India

China
Ratio of mean to median: A good-enough measure of inequality

\[ R^2 = 0.87 \]
Growth of the bottom 40% closely tracks growth at the median

Uganda

Index (1989 = 100)

Year

1980 1990 2000 2010

India

Index (1978 = 100)

Year

1980 1990 2000 2010

South Africa

Index (1993 = 100)

Year

1980 1990 2000 2010

Mexico

Index (1984 = 100)

Year

1980 1990 2000 2010

Growth of the bottom 40% closely tracks growth at the median.
A better measure than the World Bank’s “shared prosperity”

Median consumption per capita per day (2005 PPP$)

- **India**
  - 2010: 1.9
  - 2020: 3.8
  - 2030: 5.2

- **Mexico**
  - 2010: 4.5
  - 2020: 6.9
  - 2030: 8.3

- **Chile**
  - 2010: 4.9
  - 2020: 4.8
  - 2030: 14.8

A better measure than the World Bank’s “shared prosperity”
The poor and vulnerable will still account for a large share of the population over the next decades.
The median is the message

Simple and understandable

Durable over time and across countries

Good enough measure of inequality

Thank you

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Source: Birdsall and Meyer (2013), based on data from World Bank PovcalNet (iresearch.worldbank.org/PovcalNet/)

Illustrations by Daniel Hetteix, Jerry Wang, Roman Trilo (The Noun Project)
Change in median and mean tells same story as World Bank Shared Prosperity indicator (ca. 1995 to 2010)

Change at Median vs. change of mean

Change of Shared Prosperity indicator vs. change of mean
It matters at what point of the distribution we measure growth: Who benefitted between 1995-2010?