

THE CONCEPT OF POVERTY

Principles and Practices

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POVERTY MEASUREMENT

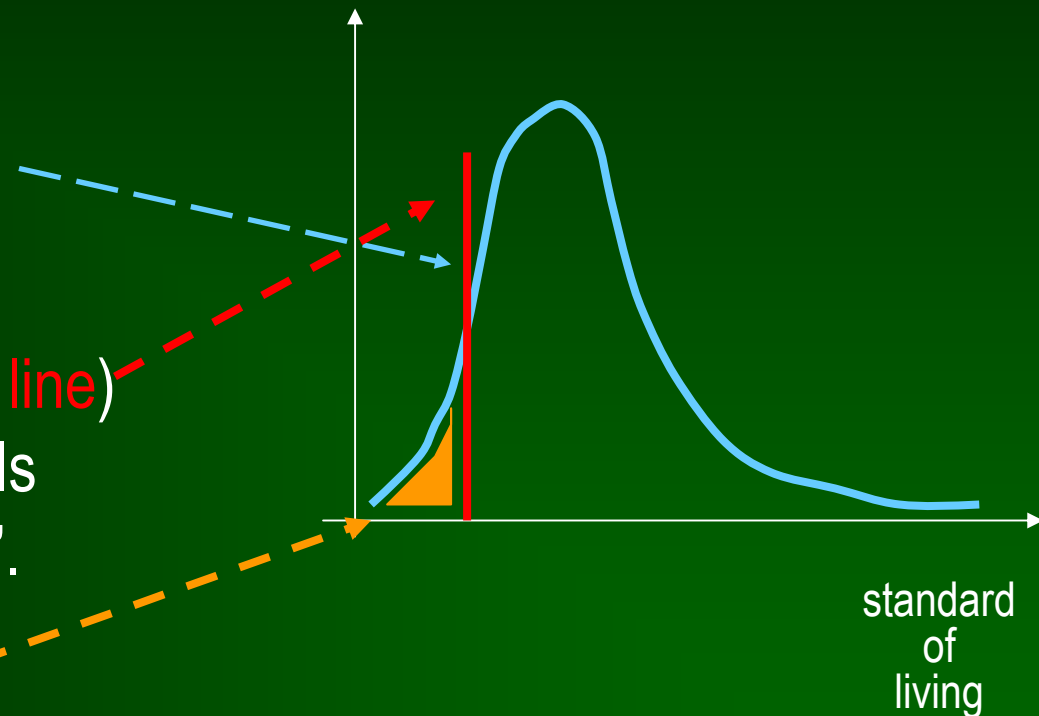
Three Key Ingredients

► Poverty measurement
assumes:

1) a distribution of living standards;

2) a critical level (**poverty line**) below which individuals are classified as “poor”.

3) a **poverty measure**.



EACH STEP IS OPEN TO DISAGREEMENT!

MOTIVATION

- ▶ Poverty analysts face a number of **questions**:
 - 1) *How do we measure "standard of living"?*
 - ▶ Individual measures of welfare
 - 2) *When do we say someone is "poor"?*
 - ▶ Poverty lines
 - 3) *How do we aggregate data on welfare into a measure of "poverty"?*
 - ▶ Poverty measures
 - 4) *How robust are the answers?*
 - ▶ Poverty profiles and sensitivity analysis

HOW DO WE MEASURE “STANDARD OF LIVING”?

- ▶ The concept of **standard of living** is inherently **multidimensional**, hence hard to measure.
- ▶ The indicator chosen is typically a single **monetary indicator**.
- ▶ Official poverty reports tend to use either **household expenditure on consumption** or **household income**.

WELFARE MEASURE: FROM THEORY TO PRACTICE

- ▶ Assume that we agree on using household expenditure as our (theoretical) measure of welfare.
- ▶ To obtain a working definition, other questions must be answered:
 - 1) *Which expenditure items should such a measure include?*
 - ▶ The construction of the welfare indicator
 - 2) *How to account for different needs of households?*
 - ▶ Equivalence scales & economies of scale
 - 3) How to deal with geographic differences in the cost of living?
 - ▶ Price indices

Q1 – WHICH EXPENDITURE ITEMS SHOULD BE INCLUDED?

- ▶ Home production
- ▶ Housing
- ▶ Durables
- ▶ Public goods and services (education, health, police, ...)
- ▶ Leisure
- ▶ Etc. etc.
- ▶ In practice, each item often requires an *ad hoc* solution.
- ▶ *Constructing consumption aggregates requires knowledge of the country and its institutions.*

Q2 - HOW TO ACCOUNT FOR DIFFERENT NEEDS OF HOUSEHOLDS?

- ▶ Households differ in size and demographic structure.
- ▶ Total *household* expenditure does not allow comparisons of *individual* welfare.
- ▶ One way of adjusting for household composition is to use **equivalence scales**.

$$x_{INDIVIDUAL} = \frac{\text{TOTAL HOUSEHOLD EXPENDITURE}}{\# \text{ ADULT EQUIVALENTS}}$$

- ▶ Unfortunately, there are no accepted methods for calculating equivalence scales...

EQUIVALENCE SCALES AND ECONOMIES OF SCALE

Examples

- ▶ OECD type-I & type-II equivalence scales:

$$AE = 0.3 + 0.7 \times \text{adult} + 0.5 \times \text{kid}$$

$$AE = 0.5 + 0.5 \times \text{adult} + 0.3 \times \text{kid}$$

- ▶ National Research Council (1995)

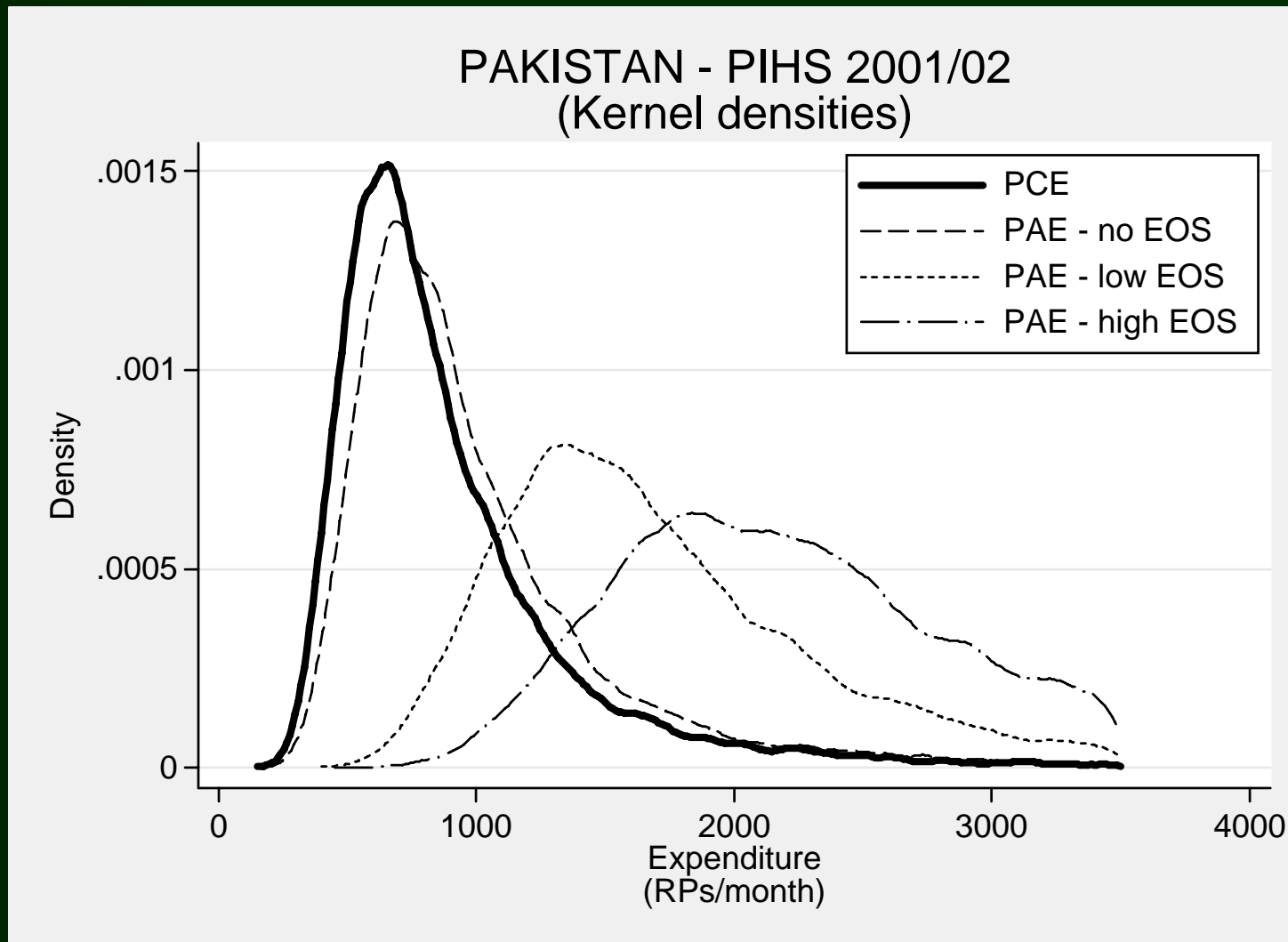
$$AE = (A + \alpha K)^\theta$$

AE = # Adult Equivalents; **A** = # Adults; **K** = # kids; **α** in $[0,1]$ = cost of a child relative to that of an adult; **θ** in $[0,1]$ \rightarrow **$(1 - \theta)$** measures the extent of economies of scale.

EQUIVALENCE SCALES: A GENERAL REMARK

- ▶ The choice of a particular equivalence scale depends on
 - ▶ *technical assumptions* about economies of scale in consumption, as well as on
 - ▶ *value judgments* about the priority assigned to the needs of different individuals such as children or the elderly.
- ▶ Results are affected by judgments.

WELFARE MEASURE AND EQUIVALENCE SCALES



Q3 - HOW TO DEAL WITH GEOGRAPHIC DIFFERENCES IN THE COST OF LIVING?

- ▶ Answer: construct a **spatial price index** to deflate the nominal consumption aggregate.
- ▶ Many options (i.e. **indices**) available in practice:
 - ▶ Laspeyres index
 - ▶ Paasche index
 - ▶ ...
- ▶ Also many possible **sources**:
 - ▶ unit values
 - ▶ price survey
 - ▶ ...

WHEN IN DOUBT...



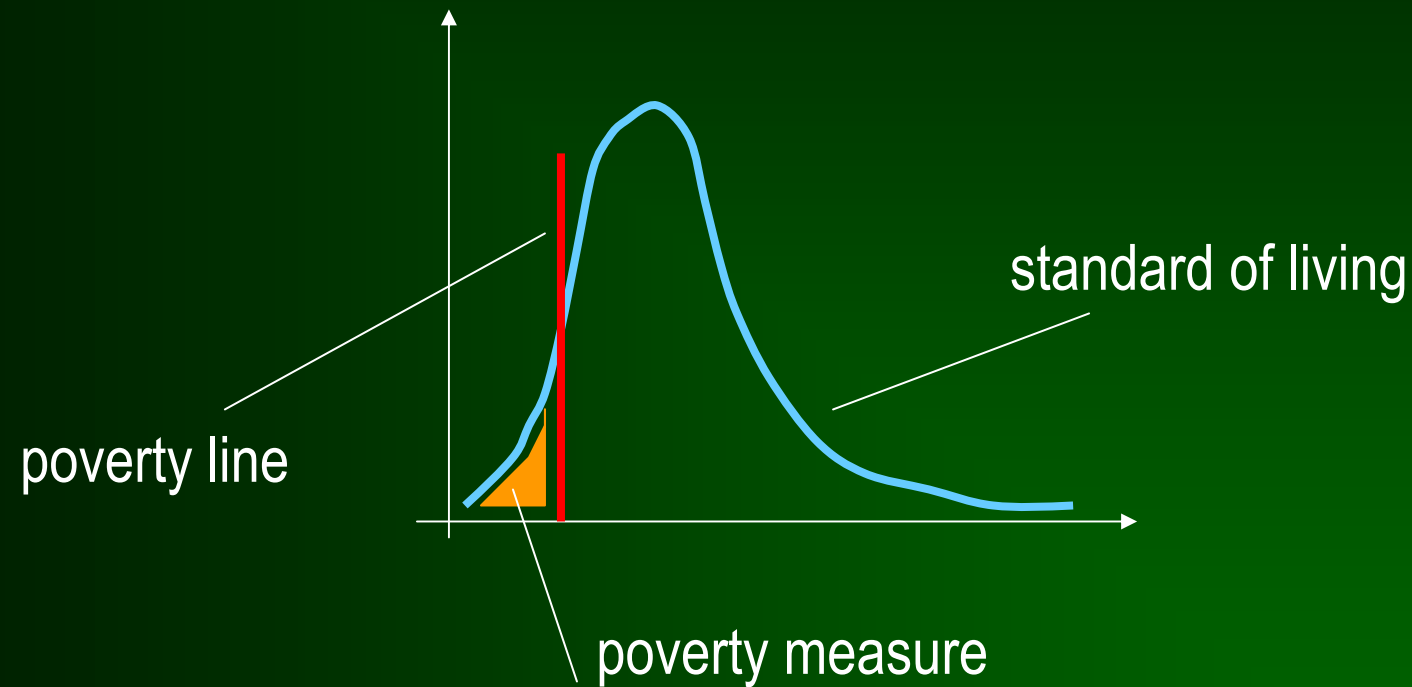
Living Standards
Measurement Study
Working Paper No. 135

LSM135
May 2002

Guidelines for Constructing Consumption Aggregates for Welfare Analysis

**By Angus Deaton (Princeton University)
and Salman Zaidi (World Bank)**

BACK TO THE KEY FIGURE ...



Practitioners and researchers use different meanings and concepts of poverty.

POVERTY

Concepts & Lines

- 1) *Poverty is having less than an objectively defined, absolute minimum.*
 - ▶ Absolute poverty
- 2) *Poverty is having less than others in society*
 - ▶ Relative poverty
- 3) *Poverty is feeling you do not have enough to get along.*
 - ▶ Subjective poverty
 - ▶ *The choice of the poverty line (and measure) depends crucially on the concept one opts for.*

CONCEPTS IN PRACTICE

- ▶ Absolute, relative, subjective poverty... how to choose?
- ▶ The choice of a certain definition is often driven by:
 1. data availability
 2. political decision
 3. historical arguments
- ▶ To illustrate, consider the following example...

TEA AND QAT



- ❑ (amphetamine-like) drug
- ❑ leaves of the *Catha edulis* shrub
- ❑ alleviates fatigue, reduces appetite

- ❑ beverage
- ❑ leaves of the *Camellia sinensis* plant
- ❑ aromatic stimulant

Giovanni Ve



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TEA AND QAT

▶ ROWNTREE (1901)

- ▶ UK
- ▶ TEA included in the list of basic goods
- ▶ But tea has little/no nutritional value
- ▶ Its replacement by a more nutritive soup... led to a riot (in Bradford Workhouse).

▶ WORLD BANK (2003)

- ▶ YEMEN
- ▶ QAT included in the bundle of basic goods
- ▶ But qat is classified as a drug by the WHO
- ▶ QAT was not removed from the basic good bundle.
- ▶ *No riot was reported after publication of the WB Report No. 24422-YEM*

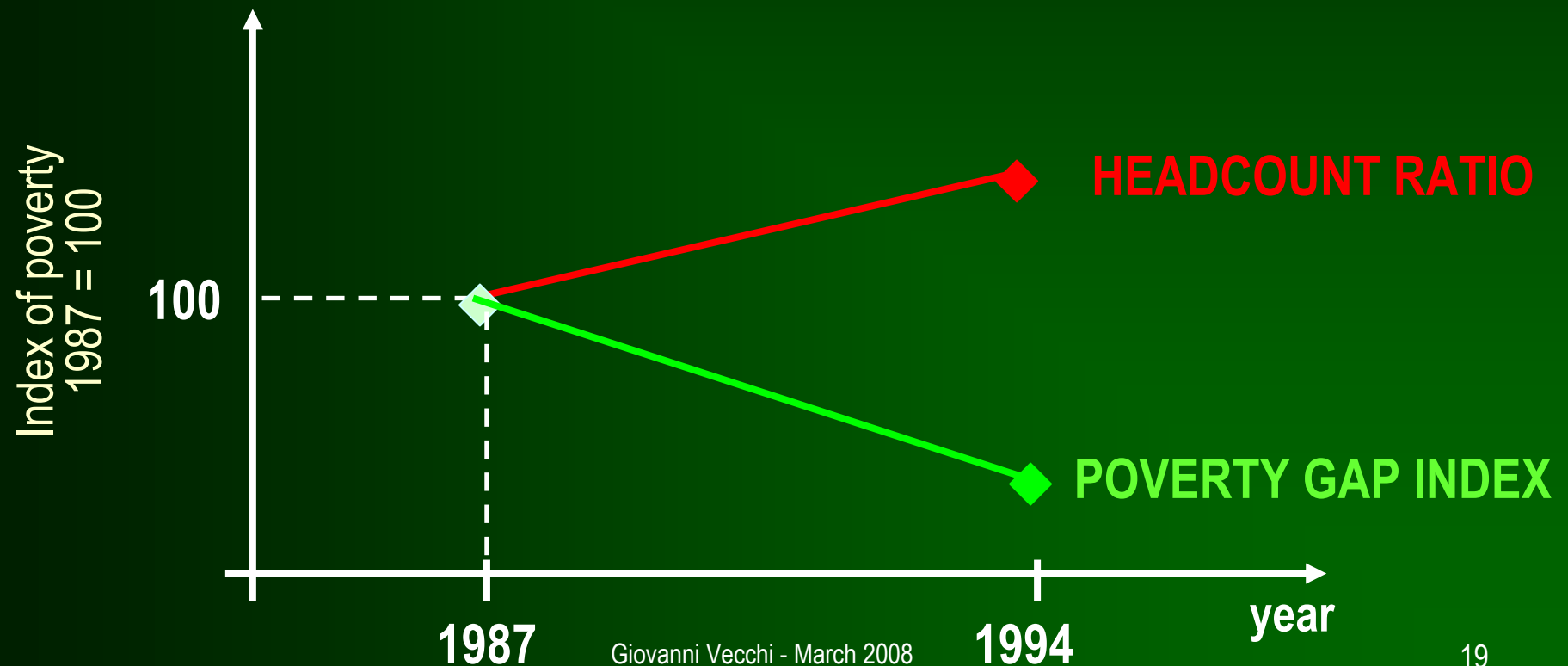
THE THIRD QUESTION: WHICH POVERTY MEASURE?

- ▶ Once we have a welfare indicator and a poverty line, we need a **poverty index** to summarize the information.
- ▶ The practice of calculating poverty measures varies widely.
- ▶ The choice of different poverty measures can lead to **conflicting results**.
- ▶ Consider the following example...

POVERTY MEASURES

The change in poverty in Ireland 1987-1994

- ▶ Callan et al. (1996) studied the **trend of poverty in Ireland**, between 1987 and 1994. The key (stylized) finding:



POVERTY

The Multidimensional Approach

- ▶ Dissatisfaction with traditional approaches has put the **concept of poverty** (and inequality) **under scrutiny**.
- ▶ Poverty is not simply a matter of low income. Poverty is a **multidimensional** phenomenon...
- ▶ One approach is based on the concept of **capability**, developed by Amartya Sen.



ON AMARTYA SEN AND ALFRED NOBEL

- ▶ “... for his contribution to **welfare economics** ...”
- ▶ **Amartya Sen** (b. 1933) receiving his **Nobel Prize** from the hands of His Majesty the King of Sweden.

AMARTYA SEN'S APPROACH

- ▶ What creates welfare is *not* goods as such, but the activity for which they are acquired.
- ▶ **commodities** → **characteristics** → **capability** → **utility**
bicycle → **transportation** → **moving** → **utility**
- ▶ In this framework:
capability = standard of living
poverty = failure of several kinds of basic capabilities.
- ▶ The assessment of the incidence, depth and severity of poverty becomes immensely complicated.

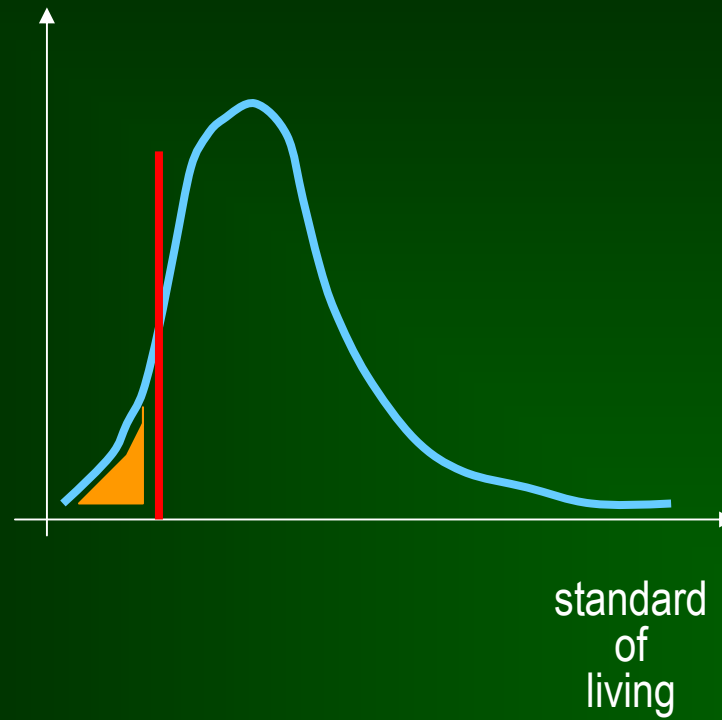
COMPOSITE INDICES

- ▶ The **Human Development Index** (UNDP 1990) combines three indicators:
 1. income
 2. life expectancy
 3. educational attainment
- ▶ Usually available at the national level.
- ▶ Device useful more for advocacy than for monitoring.
- ▶ Best employed for making *ordinal* rather than *cardinal* ranking.

SOCIAL EXCLUSION

- ▶ EU member states shared the view that poverty has to be seen in **broad terms** (financial poverty + other dimensions of deprivation). In short, **poverty = poor living**.
- ▶ **poor living** = lack of freedom to undertake important activities that a person may wish to choose.
- ▶ The literature abounds in definitions, whose interpretation is not always clear. Atkinson (1998: 68):
"Indeed [social exclusion] seems to have gained currency because it has no precise definition and means all things to all people."

WHAT AM I FORGETTING?



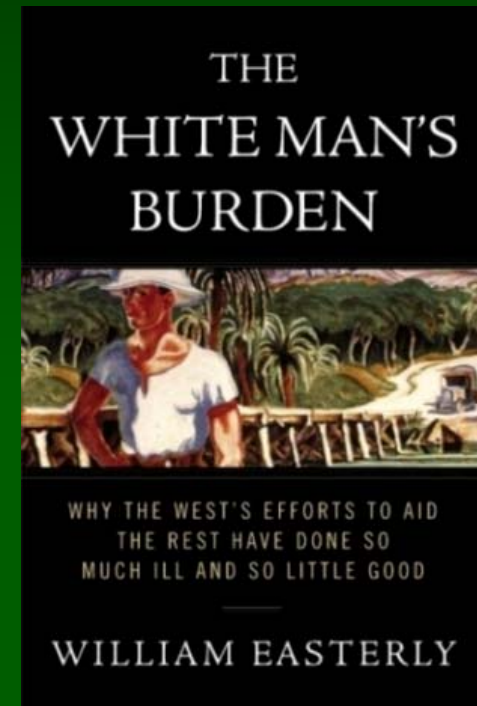
INEQUALITY !

SUMMARY & FINAL REMARKS

- ▶ Poverty cannot be defined unequivocally.
- ▶ Results (= policy priorities) are sensitive to definitional issues.
- ▶ A number of “cautionary tales” have illustrated the importance of understanding what is being measured, exactly.
- ▶ Pragmatic considerations play an important role in choosing among different methods and definitions.

BY WAY OF CONCLUSION: A QUOTATION FROM W. EASTERLY (2007)

- ▶ A **Planner** thinks of poverty as a technical engineering problem that his answers will solve.
- ▶ A **Searcher** admits he doesn't know the answers in advance; he believes that poverty is a complicated tangle of **political, social, historical, institutional, and technological** factors.



REFERENCES

- ▶ Atkinson, A. B. (1998), *Poverty in Europe*. Oxford: Basil Blackwell.
- ▶ Atkinson, A.B., B. Cantillon, E. Marlier and B. Nolan (2002), *Social Indicators. The EU and Social Inclusion*. Oxford: OUP.
- ▶ Jäntti, M. and S. Danzinger (2000), “Income Poverty in Advanced Countries”, in A.B. Atkinson and F. Bourguignon (eds.), *Handbook of Income Distribution*. Amsterdam: Elsevier.
- ▶ Jenkins , S.P. and J. Micklewright (eds.) (2007), *Inequality and Poverty Re-examined*. Oxford: Oxford University Press.