

**HUMAN DEVELOPMENT: FROM THEORY TO PRACTICE  
UNDP-HDRO, HDCA AND UNIVERSITY OF OXFORD  
TRAINING COURSE  
Queen Elizabeth House, University of Oxford, 15 Sept. 2006**

**Measuring Poverty and Inequality  
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**Contents:**

- 1) Links between inequality, poverty and HD**
- 2) Some methodological issues in standard poverty and inequality analysis**
- 3) Measuring income inequality: Lorenz curve and Gini index**
- 4) Measuring poverty: poverty indexes and policy implications**
- 5) Not only income: qualitative and empirical applications of the CA**

**Aims:**

- **To review some methodological issues related to standard poverty and inequality analysis**
  - **To discuss how some "technical" choices can hide normative issues, affect results and have policy implications**
- **to question the basic assumption that measuring poverty and inequality in the space of income is an "easy task"**
- **to help you develop the skill of reading critically figures and indexes**

## 1) Links between inequality, poverty and HD

Inequality broader than poverty → defined over the whole

distribution and not only on part of it  
(below a given poverty line z)

but narrower than HD and CA → relative and not absolute income-

based measure (how the “cake” is distributed, not how big it is neither what are the other “ingredients”)

### Degrees of complexity/disaggregating level of empirical analyses

- Unit of analysis: which relates to the way in which human diversity is accounted for
- Evaluative space(s) or object of analysis: which refers to the number and the nature of evaluative spaces involved
- Context of analysis, which refers to the degree to which structural elements, spatial factors, and environmental diversities are taken into account.

	<b>SA</b>	<b>HD</b>	<b>CA</b>
<b>Unit of analysis</b>	<b>Representative Agent</b>	<b>People (gender)</b>	<b>Human diversity (gender, age, etc.)</b>
<b>Evaluative space(s)</b>	<b>Unidimension. Economic resources (I or C)</b>	<b>Multidimens. Opportunities (I, health, educ.)</b>	<b>Multidimension. Capab., function., Freedom, empowerment</b>
<b>Context, External factors</b>	<b>N*o</b>	<b>Partially</b>	<b>Social, economic, political, cultural</b>

**Standard Approach:** most basic and common conceptualization of welfare (based on mainstream neoclassical economics) avoids any kind of

complexity. Nothing other than income distinguishes individuals, and the amount of income of an individual is all that is required to identify deprivation, evaluate inequalities, or depict quality of life and human well-being in line with the neoclassical perspective.

### **Capability Approach:**

- Plurality of units of analysis and human diversity: individual, family/household, specific sub-groups of population (i.e. women, children, elderly, by caste, by ethnic or religious group), whole community
- Plurality of evaluative spaces and domains: agency-empowerment, standard of living - well-being, capability, achieved functionings and multiplicity of variables for each domain (qual/quant, obj/subj)
- Plurality of contexts: socio-economics, geographical, cultural

### **Human Development Indexes:**

- Refer to people: conceptually recognizes human diversity but concretely pay attention only to gender
- Multidimensional evaluative spaces (from 3 to 4 in HPI-2) and various variables (a dozen)
- Context: conceptually pay attention to external factors that can affect HD achievements but only partially include differences in context (i.e. HPI-1 and HPI-2)

We will focus the attention on the Standard Approach and on the Capability Approach (not on HD)

### **Some methodological issues – Inequality and poverty of what?**

- a) Concept of economic well-being: what kind of indicator is more adequate to describe it? Income or consumption?

The choice often comes down to data availability but....

- income: command over resources; only flows or also wealth stock? Monetary or in-kind income?
  - (+) (comparing with C) more “neutral” (it measures the degree of command over resources and is not affected from preferences); useful to distinguish by income sources (such as wages, transfers etc.)
  - (-) underreporting, affected by short-term fluctuations (i.e seasonality), how to collect income from informal labor activity and home agricultural production;
- consumption: command over commodities in general or over specific types of consumption (i.e. food or housing)
  - (+) C is smoother than I (*life-cycle profile*) it shows current standard of living; it could be easier to recall expenditure and consumption, including self-consumption
  - (-) it reflects not only opportunities but also preferences so that consumption choices might be misleading (i.e. a rich household with low consumption), some expenses are not made regularly (durable goods), how take into account differences in prices, rationing, home production

Generally speaking: consumption based measures are preferred especially in low or middle income countries. The use of both may be the optimal solution.

Unit time : week? Month? Year? The whole life cycle? *Panel data* can be useful for studying the dynamic of inequality, poverty and social mobility but are scarcely available. Usually, year for income and month or year for consumption

### **Some methodological issues – Inequality and poverty among whom?**

Individuals or households?

- available statistical data are often collected to household level, in particular when refer to consumption (nb: less inequality at the household level)
- distinction between household, family etc.

Two main issues:

- o From a theoretical point of view: can we assume that well-being is equally distributed within the family? Inequality in terms of opportunities, chances and standard of livings between men and women, adults and children (intra-household allocation)
- o From a technical point of view: comparison among household with different size/structure/characteristics  $\Rightarrow$  equivalence scales.

Positive correlation between size and needs but economies of scale, household public goods (i.e. heating, housing) and different needs for different household members

Equivalence scales: Per-capita consumption. estimated by expenditure data , mainly in food consumption; arbitrary defined, useful in international comparisons (e.g. OECD scale and OECD-modified scale)

[Szekeley, Hilgert, 1999 et al. using different equivalence scales show that poverty rate varies between 13% and 66% in 19 Latin American countries: Lanjouw et al. reach similar results for transition economies]

### Subgroups of population?

Need to pay attention not only to vertical inequality (between individuals) but also horizontal inequality between culturally defined groups (F. Stewart and the neglected dimension of development): geographical or socio-economic criteria

- Emphasis on differences between groups more than within groups

### **Inequality measurement – Lorenz curve and Gini index**

#### Lorenz Curve:

- order n individuals from poorer to richer ( $x_1 \leq x_2 \leq x_3 \dots \leq x_n$ ) and compute the share of the cake that is the proportion of the total income

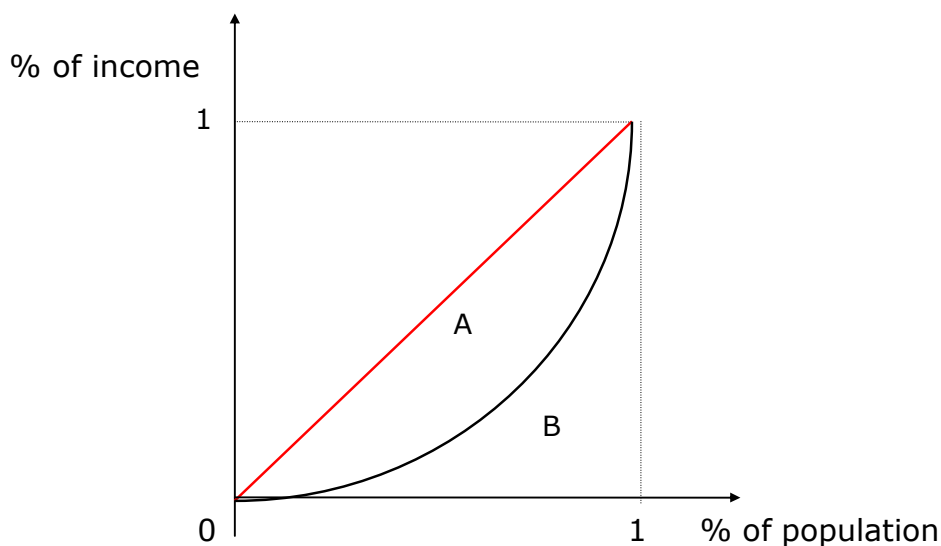
that each equal share of population received (for ex. the bottom 10% of population receives 5% of total income, etc.)

- indicate in horizontal axis the cumulative proportion of population and in vertical axis the corresponding cumulative proportion of income;
- if income is equal distributed among the population, the Lorenz curve corresponds to the diagonal line - the line of perfect equality - (the first 5% of population get 5% of the cake, the first 10% obtain 10% etc.); otherwise the Lorenz curve is a convex curve and the degree of convexity is higher when inequality is higher.

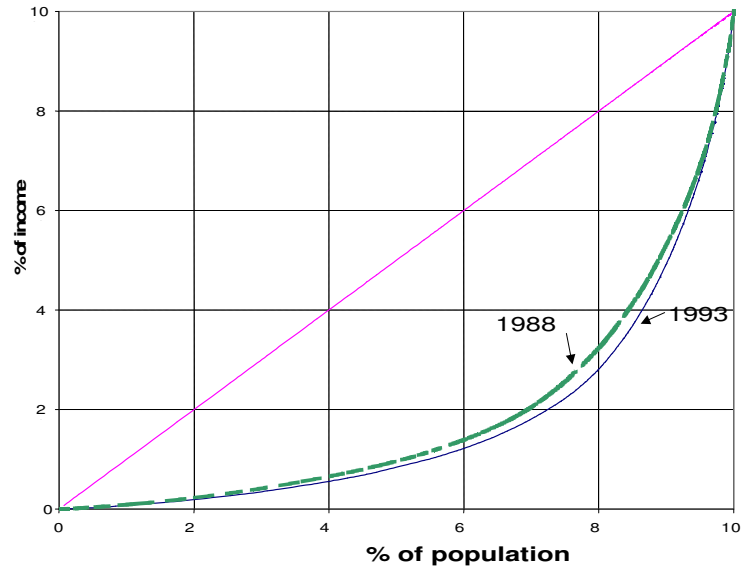
Gini index (or concentration index)

$$G = \frac{\sum_i \sum_j |x_i - x_j|}{2n^2\mu}$$

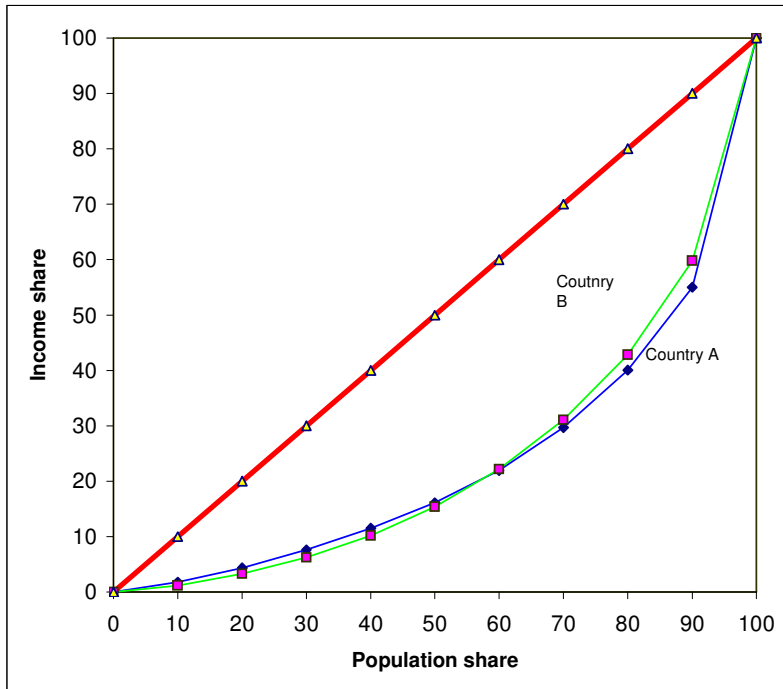
- G=0 perfect equality; G=1 max inequality
- Advantage: we can consider the Gini index also in term of Lorenz curve  $A/(A+B)$
- Warning: an identical value of G could be associated to two different Lorenz curve. (Why? Because, as all the statistical inequality index, it is a measure of dispersion and not of asymmetry)



Lorenz curves for world income distribution for 1988 and 1993



Lorenz curves crossing



## **Poverty analysis: who are the poor (identification phase)**

- 1) Absolute poverty lines (you are poor if you have not enough) directly defined in terms of basic needs (food, clothing, shelter) or indirectly in terms of income (minimum amount of money for basic necessities); arbitrarily chosen (1 or 2 \$ a day in World Bank approach)  
(-) only basic physiological needs; what is fundamental for the human life is arbitrarily chosen; is an adequate framework just for developing countries?
  
- 2) Relative poverty lines: (you are poor if you have less than others) it refers to the actual standard of living of the whole population (income or consumption); a given % of the mean/median income or expenditure (e.g. ISPL=50% of the mean income; EU-wide pl = 60% of European equivalised median income); the lowest decile/quintile of population  
(-) do not allow for comparisons across countries or over the time (to the same poverty rate can correspond a substantial different welfare level in absolute terms)  
(-) The choice of the cutoff point is arbitrary;  
(-) poverty measures are insensitive to overall well-being: because P depends on the distribution of income or consumption not on their level. If poor are getting poorer, all things equal for the others, mean income decreases, z decreases, the poverty measure decreases despite the drop in absolute living standard of the poor (idem if rich are getting richer)

## **Poverty analysis: how many poor there are (aggregation phase)**

Incidence of poverty: Head-count index

[1]  $H = q/N$

q = poor people (i.e. population living below the PL)

N = whole population

simply the share of population with income/consumption below the PL

(+) simple to construct; easy to understand

(-) it does not take into account the intensity of poverty (it assumes that all poor are equally poor); the index does not change if individuals below PL become poorer or richer as long as they remain below PL; policies based on H might be sub-optimal; in fact, the easiest way to reduce H is to target benefits to people just below PL.

But what about the poorest?

country A	100	100	150	150	p.l = 125	H= 50%
country B	124	124	150	150	p.l = 125	H= 50%

Depth of poverty: Poverty gap (PG) and poverty gap index (PGI)

$$PG = \frac{1}{N} \sum_{i=1}^q (z - x_i)$$

How far off households are from the poverty line.

PG is the average, over all people, of the gaps between the income of the poor ( $x_i$ ) and the PL ( $z$ ). It indicates the average extent to which individuals fall below the poverty line.

$$PGI = \frac{1}{N} \sum_{i=1}^q \frac{(z - x_i)}{z}$$

PGI expresses the poverty gap as a percentage of the PL

(+) they can be interpreted as the average shortfall of poor people; they show how much would have to be transferred to the poor to bring their income up to the PL. Put in other words: they are the minimum cost for eliminating poverty (without targeting costs or

distortion effects); PG does not imply that there is a discontinuity, a “jump” at the poverty line

(-) they do not capture differences in the severity of poverty amongst the poor and ignore “inequality among the poor” ; they are insensitive to transfers among the poor

country A	100	100	150	150	p.l = 125	PG=12.5	PGI=10%
country B	80	120	150	150	p.l = 125	PG=12.5	PGI=10%

Severity of poverty: Squared poverty gap index (PGI<sup>2</sup>)

$$PGI^2 = \frac{1}{N} \sum_{i=1}^q \left( \frac{z - x_i}{z} \right)^2$$

Is the average of the square relative PG of the poor: it is a weighted sum of the poverty gaps as a proportion of the PL. The weights are the proportionate poverty gaps themselves

(+) it takes into account inequality among the poor: a transfer from a poor to an even poorer would reduce the index; a transfer from a very poor to a less poor would increase the index

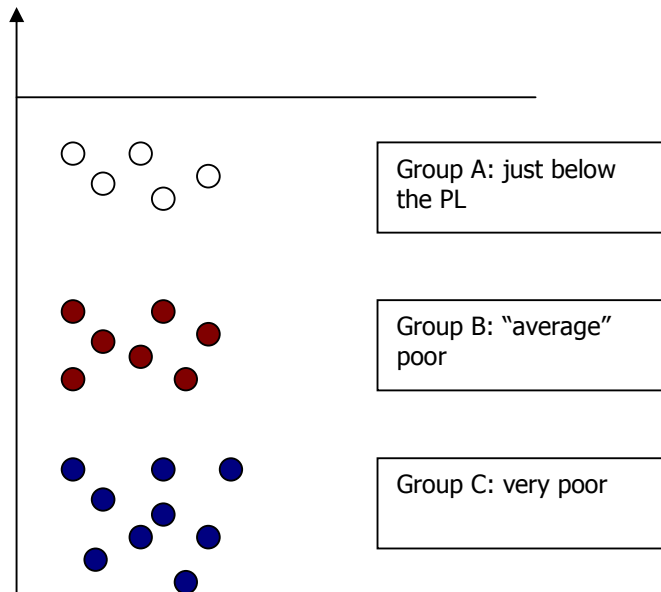
(-) it is relatively difficult to read and interpret

### **Poverty analysis: some policy implications**

PG, PGI and SPG are important complement of the incidence of poverty: some groups of population can have a high incidence but low poverty gap and viceversa; important for policy evaluation

	Head count: % $P_0$	Rank	Poverty gap: % $P_1$	Rank	Poverty severity: × 100 $P_2$	Rank
Small farmers	81.6	1	41.0	1	24.6	1
Large farmers	77.0	2	34.6	2	19.0	2
Unskilled workers	62.7	3	25.5	4	14.0	5
Herders/fishermen	51.4	4	27.9	3	16.1	3
Retirees/handicapped	50.6	5	23.6	5	14.1	4

Source: Coussol, Heitsch and Wodon (2001)



Figure

- PGI is more sensitive to the well-being of the poorest than H and SPGI more than PGI
- H treats all the poor similarly : people in group A, B and C are given an equal value (=1)
- PG gives a value relative to the distance to the PL (those in group B have on average twice the value of those in A)
- SPG gives a value of the squared distance (those in group B have on average a value 4 times that of those in group A)
- Using H policies would focus on group A (with 1 \$ one household in group A goes out of poverty)
- Using PGI focus would be on A, B and C (with 1 \$ the poverty gap will be reduced by 1 for any household in group A, B or C)

- Using SPG focus would be on group C (with 1 \$ one household goes from group C to group B and reduces SPG by  $3^2-2^2=5$ : from B to A SPG will be reduced only by 1)

**Not only income: multidimensional poverty and inequality approaches**

- Participatory poverty assessments: poor people report their condition largely in terms of material deprivation (low incomes, lack of employment, shortage of food, inadequate housing, inadequate access to health services and clean water) but they also give weight to non-material social, psychological factors (insecurity, social and political conflict, lack of autonomy), three-volume series "Voices of the poor" edited by D. Narayan
- Qualitative analysis: better integration of qualitative and quantitative approaches to poverty assessment in the developing world, for instance:
  - a) using quant survey data to determine individuals or communities to be studied through qual approach
  - b) using qual work to pre-test quant survey questionnaires or for refining the poverty index

(R. Kanbur, 2003, Q-Squared: combining qualitative and quantitative methods in poverty appraisal, [www.q-squared.ca](http://www.q-squared.ca))

- Empirical application of the CA (Table 1)
  - Take into consideration a plurality of domains (from 3 to 14)

- Pay attention to human diversity (gender, children, specific subgroups)
- Are equally addressed to developing and developed countries
- Are primarily focused on achievements even if some attempt to measure capabilities has been done
- Make equally use of both aggregate figures and micro-datasets
- Are generally based on secondary data with some interesting experience of gathering primary data (table 2)

Available soon on the HDCA website ([www.hd-ca.org](http://www.hd-ca.org))

- An updated selection and basic features of empirical papers on CA, with some briefing on the applied techniques and a basic reading lists for the most common techniques
- An updated selection and basic features of questionnaires expressly created to measure CA, F, A, WB
- An updated list of data-sources and datasets available on the web and potentially useful for empirical applications of the CA

# Measuring Poverty and Inequality

**By:**

**Enrica Chiappero Martinetti**

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# Contents

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- **Some methodological issues in standard poverty and inequality analysis**
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- **Measuring poverty**
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## **Aims**

- **To review some methodological issues related to standard poverty and inequality analysis**
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  - **to question the basic assumption that measuring poverty and inequality in the space of income is an “easy task”**
  - **to help you develop the skill of reading critically figures and indexes**

## **Inequality, Poverty and HD (1)**

- **Inequality broader than poverty → defined over the whole distribution and not only on part of it (below a given poverty line  $z$ )**
- **but narrower than HD and CA → relative and not absolute income-based measure (how the “cake” is distributed, not how big it is nor what are the other “ingredients”)**

## Inequality, Poverty and HD (2)

NHDRs

	SA	HD	
Unit of analysis	Representative Agent	People (gender)	Human diversity (gender, age, etc.)
Evaluative space(s)	Unidimension. Economic resources (I or C)	Multidimens. Opportunities (I, health, educ.)	Multidimension. Capab., function., Freedom, empowerment
Contextual External factors	no	Partially (HPI-1 and HPI-2)	Yes. Social, economic, political, cultural etc.

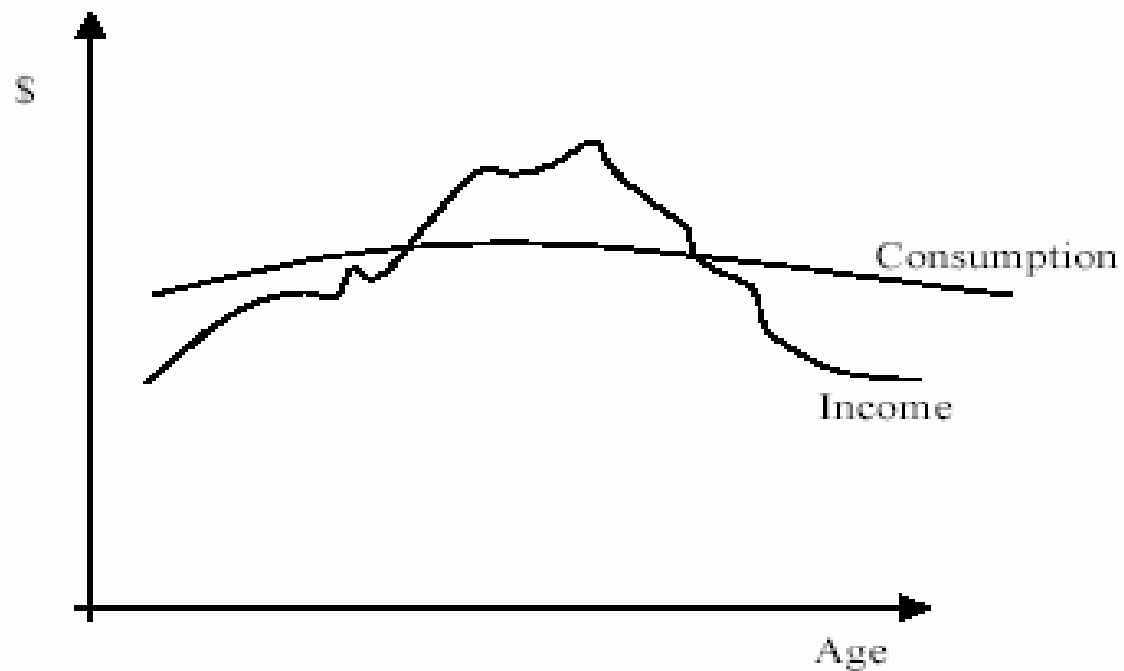
## Some methodological issues – Inequality and poverty of what? (1)

### Indicators of welfare:

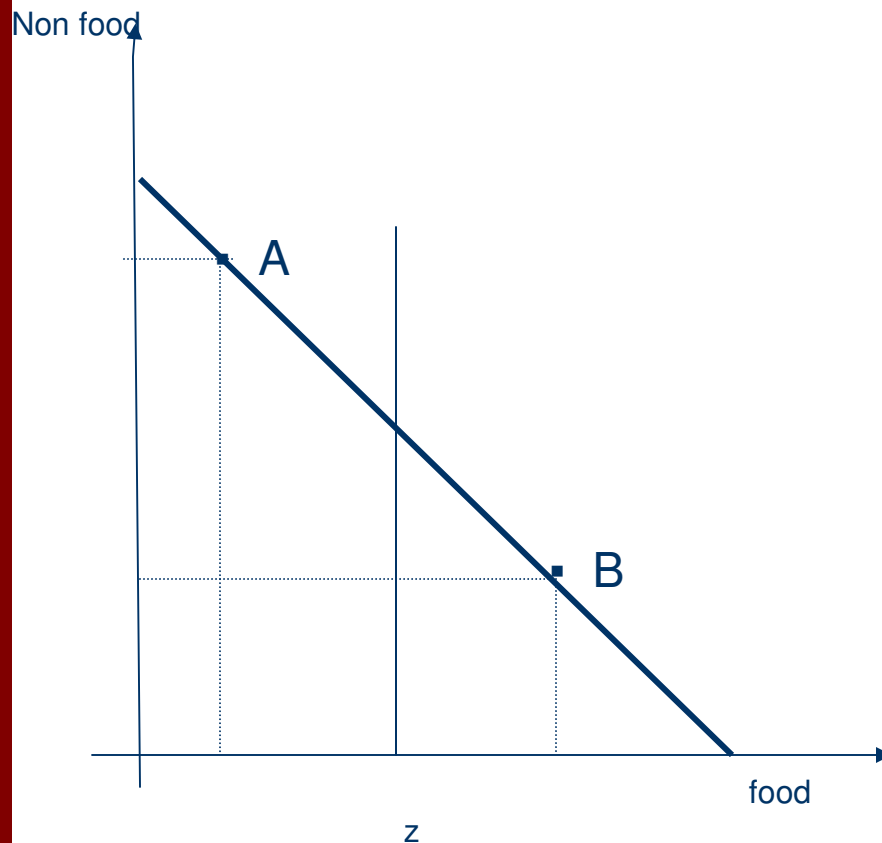
- ⇒ Income: Command over resources; only flows or also wealth stock? Monetary or in-kind income?
- ⇒ Consumption: Command over commodities in general or over specific types of consumption (i.e. food or housing)
- Unit time: Week? Month? Year? Life cycle? (Panel data)

The choice often comes down to data availability but....

## Some methodological issues – Inequality and poverty of what? (3)



## Some methodological issues – Inequality and poverty of what? (2)



2 individuals, A and B, = income  
but  $\neq$  preferences

Z = poverty threshold in terms  
of a minimum food  
expenditures

If Income is chosen:  $A=B$

If food consumption is chosen A  
is poor while B is not

## Some methodological issues - Inequality and poverty among whom? (1)

- Individuals or households?
  - ⇒ *Theoretical point of view*: Can we assume that well-being is equally distributed within the family? (intra-household allocation)
  - ⇒ *Technical point of view*: Comparison among household with different size/structure/characteristics – equivalence scales (per capita-consumption; estimated by expenditure data; arbitrary defined)

## Some methodological issues - Inequality and poverty among whom? (2)

- Subgroups of population?

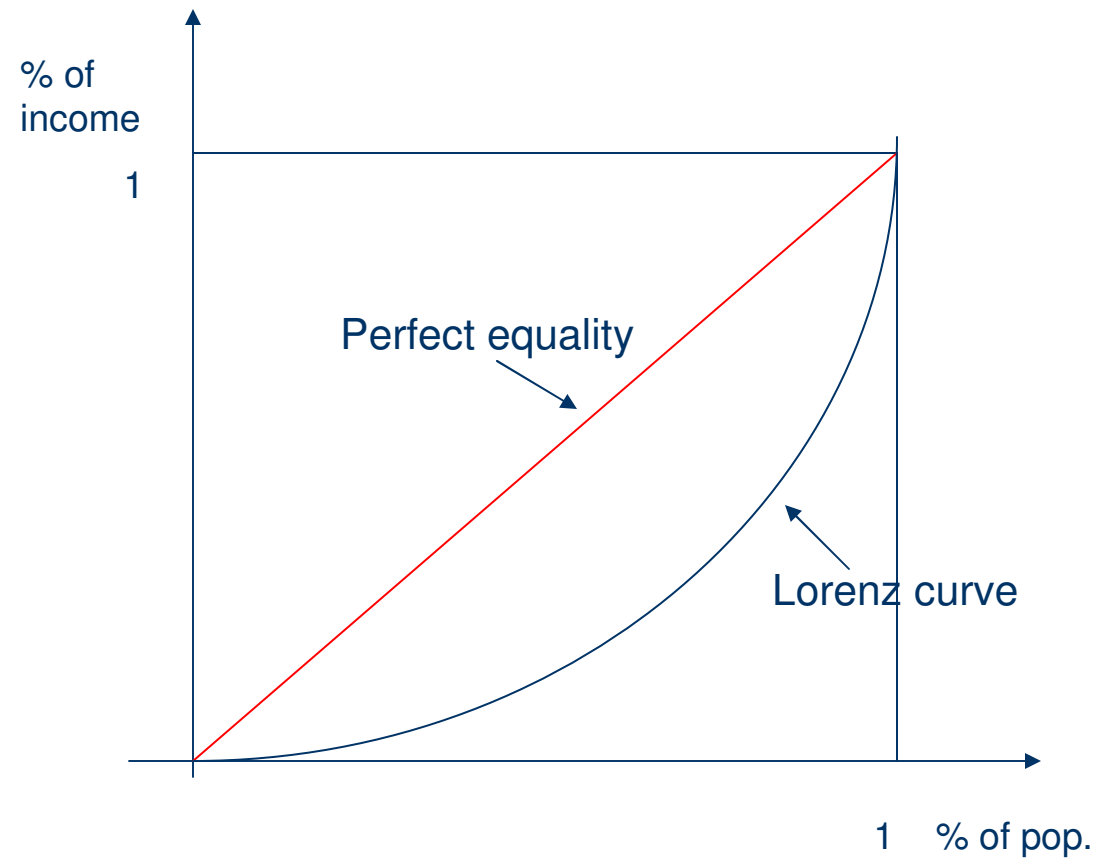
Not only vertical inequality but also horizontal inequality between

- a) culturally defined groups (F. Stewart and the neglected dimension of development)
- b) geographical or socio-economic criteria

Emphasis on differences between groups as well as within groups

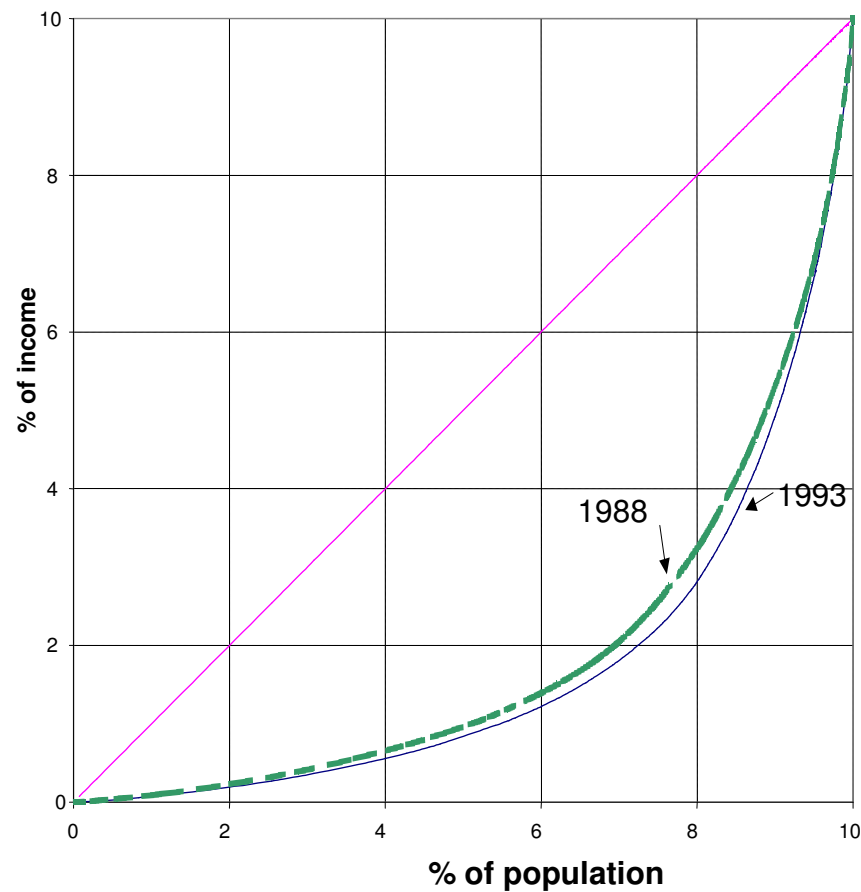
# Measuring Income Inequality – Lorenz curve (1)

Lorenz curve



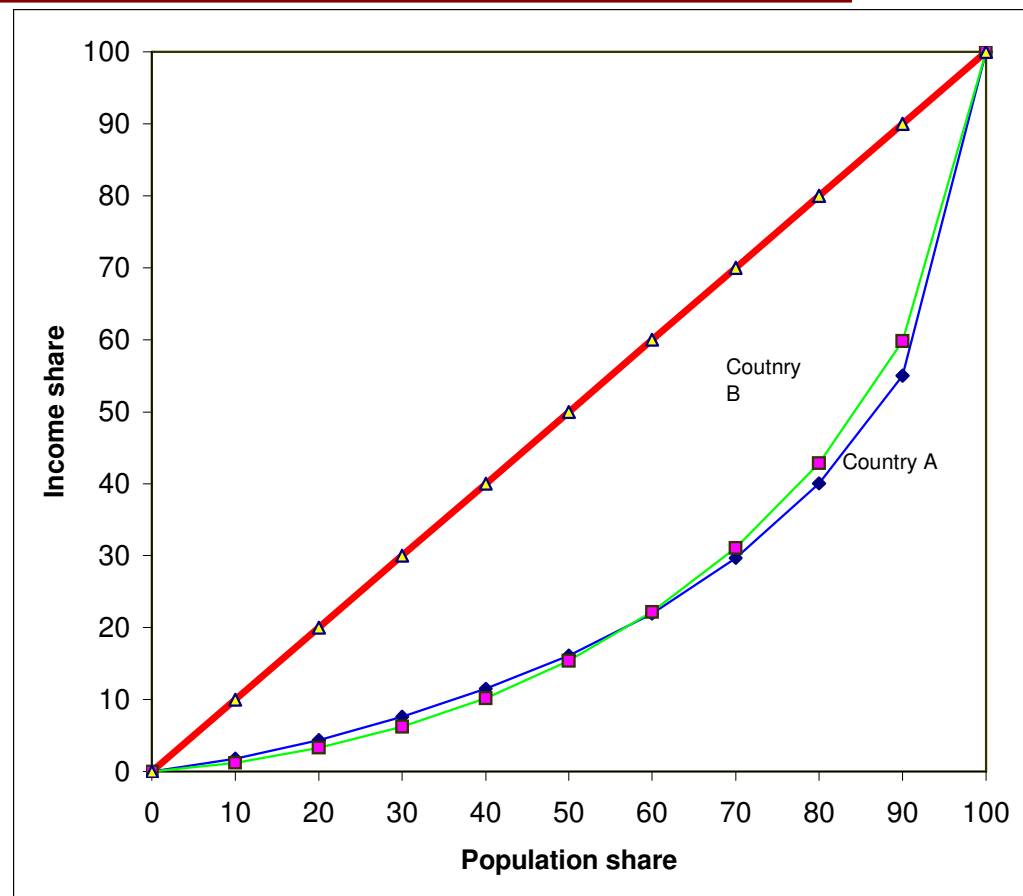
# Measuring Income Inequality – Lorenz curve (2)

Lorenz curves for world income distribution in 1998 and 1993



# Measuring Income Inequality – Lorenz curve (3)

Lorenz curve crossing, We cannot conclude that  $A > B$  or viceversa



## Measuring Poverty: who are the poor - identification phase (1)

- **Absolute poverty lines:** (you are poor if you have not enough) directly defined in terms of basic needs or indirectly in terms of income;
  - (+) allow comparisons across countries or over time
  - (+) adequate for low or middle income countries (?)
  - (-) only basic physiological needs
  - (-) basic needs arbitrarily chosen

## Measuring Poverty: who are the poor - identification phase (2)

- **Relative poverty lines:** (you are poor if you have less than others) refer to the actual standard of living of the whole population (a given % of the mean/median income or expenditure)
  - (+) adequate for richer countries (?)
  - (-) do not allow for comparisons across countries or over the time
  - (-) arbitrariness in the choice of the cut-off point
  - (-) poverty measure are insensitive to overall well-being

## Measuring Poverty: how many poor there are - aggregation phase (1)

- **Incidence of poverty:** Head-count index:

$$H = q/N$$

q = poor people (i.e. population living below the PL)

N = whole population

(+) simple to construct; easy to understand

## Measuring Poverty: how many poor there are - aggregation phase (2)

(-) ignores the intensity of poverty (all poor are equally poor);

(-) over time does not change if individuals below PL become poorer or richer as long as they remain below  $z$

(-) policies based on  $H$  might be sub-optimal;

Ex:

country A	100	100	150	150	p.l = 125	H= 50%
country B	124	124	150	150	p.l = 125	H= 50%

## Measuring Poverty: how many poor there are -aggregation phase (3)

- **Depth of poverty:**

Poverty gap = PG =  
average, over all people, of the  
gaps between the income of the  
poor ( $x_i$ ) and the PL ( $z$ )

$$\frac{1}{N} \sum_{i=1}^q (z - x_i)$$

Poverty gap index = PGI =  
PG but poverty gap as a  
percentage of the PL ( $z$ )

$$\frac{1}{N} \sum_{i=1}^q \frac{(z - x_i)}{z}$$

## Measuring Poverty: how many poor there are - aggregation phase (4)

- (+) average shortfall of poor people (minimum cost for eliminating poverty)
- (+) there is no discontinuity at the poverty line
- (-) ignore inequality among the poor and do not capture differences in the severity of poverty

Ex:

country A	100	100	150	150	p.l = 125
				PG=12.5	PGI=10%
country B	80	120	150	150	p.l = 125
				PG=12.5	PGI=10%

## Measuring Poverty: how many poor there are -aggregation phase (5)

- **Severity of poverty:** Squared poverty gap index (PGI<sup>2</sup>):

weighted sum of the poverty gaps as a proportion of the PL; weights are the proportionate poverty gaps themselves

- (+) it takes into account inequality among poor
- (-) not easy to read and interpret

$$\frac{1}{N} \sum_{i=1}^q \left( \frac{z - x_i}{z} \right)^2$$

# Poverty analysis: some policy implications (1)

- PG, PGI and SPG are important complement of the incidence of poverty (H): some groups of population can have a high incidence but low poverty gap and vice versa; important for policy evaluation

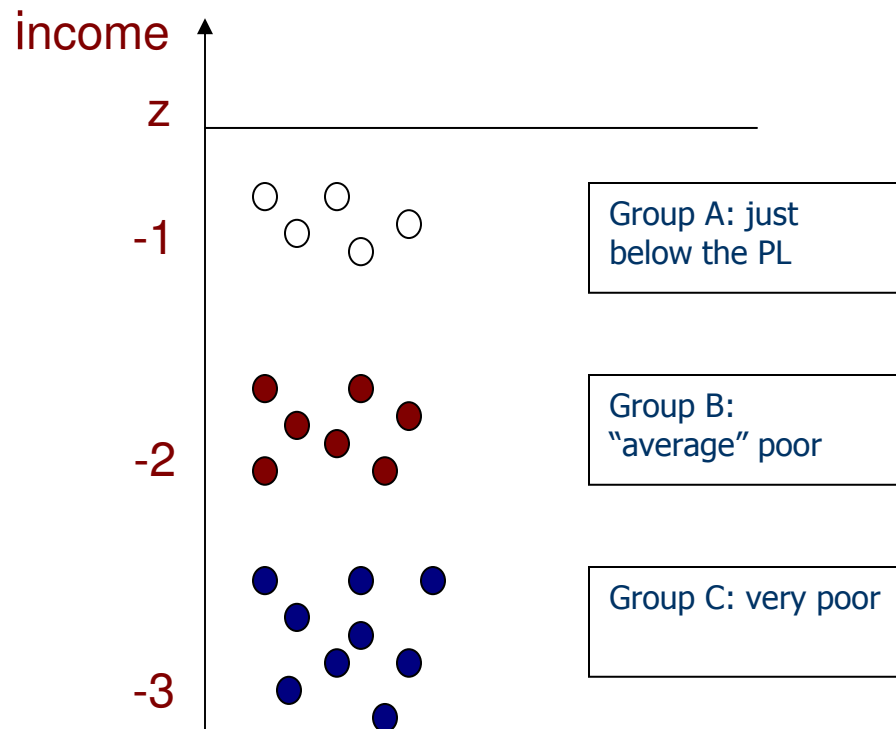
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Source: Condouel, Heitschel and Wodon (2001)

# Poverty analysis: some policy implications (2)

- H treats all poor similarly:  
policies would focus on group A

- SPG gives a value of the squared distance to  $z$ ;  
using SPG policies would focus on group C



# Not only income: multidimensional approaches to poverty and inequality (1)

- Participatory poverty assessments: WB three-volume series “Voices of the poor” edited by D. Narayan
- Qualitative analysis: (R. Kanbur, 2003, [www.q-squared.ca](http://www.q-squared.ca))
- Empirical application of the CA



Microsoft Word  
Document

## Not only income: multidimensional approaches to poverty and inequality (2)

- Take into consideration a plurality of domains (from 3 to 14)
- Pay attention to human diversity (gender, children, specific subgroups)
- Are equally addressed to developing and developed countries
- Are primarily focused on achievements even if some attempt to measure capabilities has been done
- Make equally use of both aggregate figures and micro-datasets
- Are generally based on secondary data with some interesting experience of gathering primary data



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**Table 1 – A non-exhaustive list of some recent or well-known empirical analysis based on CA**

Reference	Dataset			Main features					Focus	Technique
	<i>PD or SD</i>	<i>macro or micro</i>	<i>Source</i>	<i>No. of variables</i>	<i>No. of dimensions</i>	<i>Human diversity</i>	<i>Context</i>	<i>Linkages between dimensions or levels</i>		
<i>Author(s) – year</i>									<i>Achieved Functionings (F)</i> <i>Capabilities (C)</i> <i>Agency (A)</i>	
Sen (1985)	SD	Macro	UN	3	3	No	Selected countries	No	F	Descriptive statistics Partial ranking
UNDP (1990) HDI	SD	Macro	UN	4	3	no	almost all countries	no	F	Normalization through scaling (linear functions) Log transformation for GDP Aggregation by arithmetic mean Complete ranking (human development index)
UNDP (1995) GDI	SD	Macro	UN	4	3	yes (ex-ante) gender	almost all countries	no	F	Normalization through scaling (linear functions) Log transformation for GDP Equally distributed index Arithmetic mean Complete ranking (gender development index)
Drèze, Sen (2002)	SD	Macro	Indian National		3	Yes	India	No	F	Descriptive statistics
UNDP (1997) HPI -1 HPI-2	SD	Macro	UN	4	3 (4 in HPI-2)	no	developing vs. industrialized countries	no	F	Generalized weighted mean with $\alpha=3$ Complete ranking (human poverty index)
Balestrino, Sciclone (2001)	SD	Macro	SHIW ISTAT	26	6	no	Italian regions	yes	F	Factor analysis Complete ranking (functioning-based well-being index)
Baliamoune (2003)	SD	Macro	UN	11	7	no	almost all countries	no	F	Fuzzy sets theory Complete ranking (human well-being index)
Brandolini, D'Alessio (1998)	SD	Micro	SHIW	20	6	yes (ex-post)	Italy	yes	F	Descriptive statistics Sequential stochastic dominance + multidimensional poverty index Partial and complete ranking (functioning deprivation index)

Chiappero-Martinetti (2000)	SD	Micro	ISTAT multipurp	34	5	yes (ex post): subgroups of population	Italy	yes	F	Fuzzy sets theory Complete ranking (overall well-being index)
Lelli (2001)	SD	Micro		54	7	yes (ex-post)	Belgium	yes	F	Factor analysis vs. fuzzy analysis
Klasen (2000)	SD	Micro		-	14	yes (ex-post)	South Africa	yes	F	Principal component analysis Complete ranking (multi-component deprivation index)
Robeyns (2002)	SD	Micro	BHPS	-	14	yes (ex-post) age and gender	UK	between income and functioning	F	Descriptive statistics
Kuklys (2003)	SD	Micro	BHPS	15	4	yes (ex-ante)	UK	yes	F	MIMIC model
Burchardt, Le Grand (2002)	SD	Micro	BHPS		1	Yes (ex-ante) gender	UK		F & C	
Anand, Hunter, Smith (2005)	SD	Micro	BHPS		6	no	UK	yes	F	Regression analysis
Addabbo, Facchinetti, Mastroleo (2006)	SD	Micro	ISTAT			Yes (ex-ante) children	Italy		F	Fuzzy set theory
Addabbo, Facchinetti, Di Tommaso (2004)	SD	Micro	ISTAT			Yes (ex-ante) children	Italy		F	Structural Equation Model and fuzzy set theory
Schockkoert, van Ootogem (1990)	PD		Ad-hoc quest.	46	6	yes (ex-ante) unemployed	Belgium	yes	F	Factor analysis Regression analysis
Qizilbash, Clark (2002-2005)	PD		Ad-hoc quest	30	20 12 (core dim.)	Yes (ex-post)	South Africa	No	F	Fuzzy set theory; supervaluationist approach
Anand, van Hees (2006)	PD		Ad hoc quest.	30	7	no	UK	yes	F & C & A	Correlation and regression analysis
Alkire & Chiappero-Martinetti (2006)	PD		Ad hoc quest.	86	6	Yes (ex-ante) Gender	India	yes	F & A	Correlation analysis; Multidimensional scaling
Biggeri et al. (2006)	PD		Ad-hoc quest	Near 60	14	Yes (ex-ante) Children	Different countries	yes	C & A	Descriptive statistics

**Table 2 – Primary Analysis**

Author(s)	Method	N° of cases	Unit <sup>1</sup>	Eval. space <sup>2</sup>	Domains	Kind of variables <sup>3</sup>						Strengths	Estimated time for interview	Estimation of costs	Download questionnaire and paper
						O	S	Q <sub>1</sub>	Q <sub>2</sub>	D	S				
Alkire S. (2005)	Direct Interviews	220	I (women)	F & A	6: Education, Employment Househ. Duties Health, Mobility Group particip.	X	X	X	X	X	X	Direct measurement of agency	30-45 min.		
Anand, van Hees (2005)	Postal interviews	270	I	C,F,A	7: Happiness, Health, sense of achievem., social relat., Intellectual stimulations, environment, personal projects.		X		X		X	4 concepts of advantage (C,F,WB,A)			
Biggeri et al (2005)	Direct interviews		I (children)	C	14, including life and physical health, love and care, mental wb, social relations, education, leisure etc.	x	x	x	x	x	x	First attempt to estimate children capabilities trough questionnaires and focus group discussion	45 min.		
Qizilbash, Clark (2005)															

Legenda:

(1) I=individual; F=family; H=household; G=group