

# Poverty, Inequality and Development ( UG Hons. 3<sup>rd</sup> year)

by

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# Poverty, Inequality, and Development

- Outline:

- Measurement of Poverty and Inequality
- Economic characteristics of poverty groups
- Why is inequality a problem?
- Relationship between growth and inequality
- Relationship between growth and poverty

# Poverty, Inequality, and Development

- Introduction and Importance
  - Absolute poverty and indicators
  - Economic characteristics of the poor
  - Policy options for addressing poverty

# Poverty, Inequality, and Development

- **Case Studies:** Microfinance - Hope for the Poor: The Grameen Bank of Bangladesh at
- Workfare as a Poverty Policy: The Bangladesh Food for Work Program

[http://wps.aw.com/aw\\_todarosmit\\_econdevlp\\_8/o,6111,284582-,00.html](http://wps.aw.com/aw_todarosmit_econdevlp_8/o,6111,284582-,00.html)

- Pushing back poverty in India at

[http://www.ifpri.org/pubs/books/ufa/ufa\\_ch27.pdf](http://www.ifpri.org/pubs/books/ufa/ufa_ch27.pdf)

# Measuring Inequality and Poverty

- Measuring Inequality:
  - Personal or size distribution of income deals with the individual persons or households and the total income they receive
  - Functional or factor share distribution of income uses the share of total national income that each of the factors of production receives

# Measuring Inequality

- Personal or size distribution of income
  - Quintiles and Deciles
  - Lorenz Curve
  - Gini Coefficients
  - Coefficient of Variation (CV)

# Measuring Inequality

- Quintiles and Deciles
  - Divide the population into successive quintiles or deciles according to ascending income levels and then determine the proportion of N.I received by each income group
  - Common measure of income inequality is the ratio of incomes received by the top 20% and bottom 40% of the population

**TABLE 5.2** Some Income Distribution Estimates, 1990s

Country	Quintile					Highest 10%	Year
	1st	2nd	3rd	4th	5th		
Bangladesh	9.4	13.5	17.2	22.0	37.9	23.7	1992
Botswana	3.6	6.9	11.4	19.2	58.9	42.9	1986
Brazil	2.5	5.7	9.9	17.7	64.2	47.9	1995
Colombia	3.1	6.8	10.9	17.6	61.5	46.9	1995
Costa Rica	4.0	8.8	13.7	21.7	51.8	34.7	1996
Ghana	7.9	12.0	16.1	21.8	42.2	27.3	1992
Guatemala	2.1	5.8	10.5	18.6	63.0	46.6	1989
Honduras	3.4	7.1	11.7	19.7	58.0	42.1	1996
India	9.2	13.0	16.8	21.7	39.3	25.0	1994
Jamaica	5.8	10.2	14.9	21.6	47.5	31.9	1991
Pakistan	8.4	12.9	16.9	22.2	39.7	25.2	1991
Peru	4.9	9.2	14.1	21.4	50.4	34.3	1994
Philippines	5.9	9.6	13.9	21.1	49.6	33.5	1994
South Africa	3.3	5.8	9.8	17.7	63.3	47.3	1993
Zambia	3.9	8.0	13.8	23.8	50.4	31.3	1993
Averages	5.2	8.5	13.7	20.8	51.8	36.0	

Source: World Bank, 1998 *World Development Indicators* (Washington, D.C., World Bank, 1998), tab. 2.8.

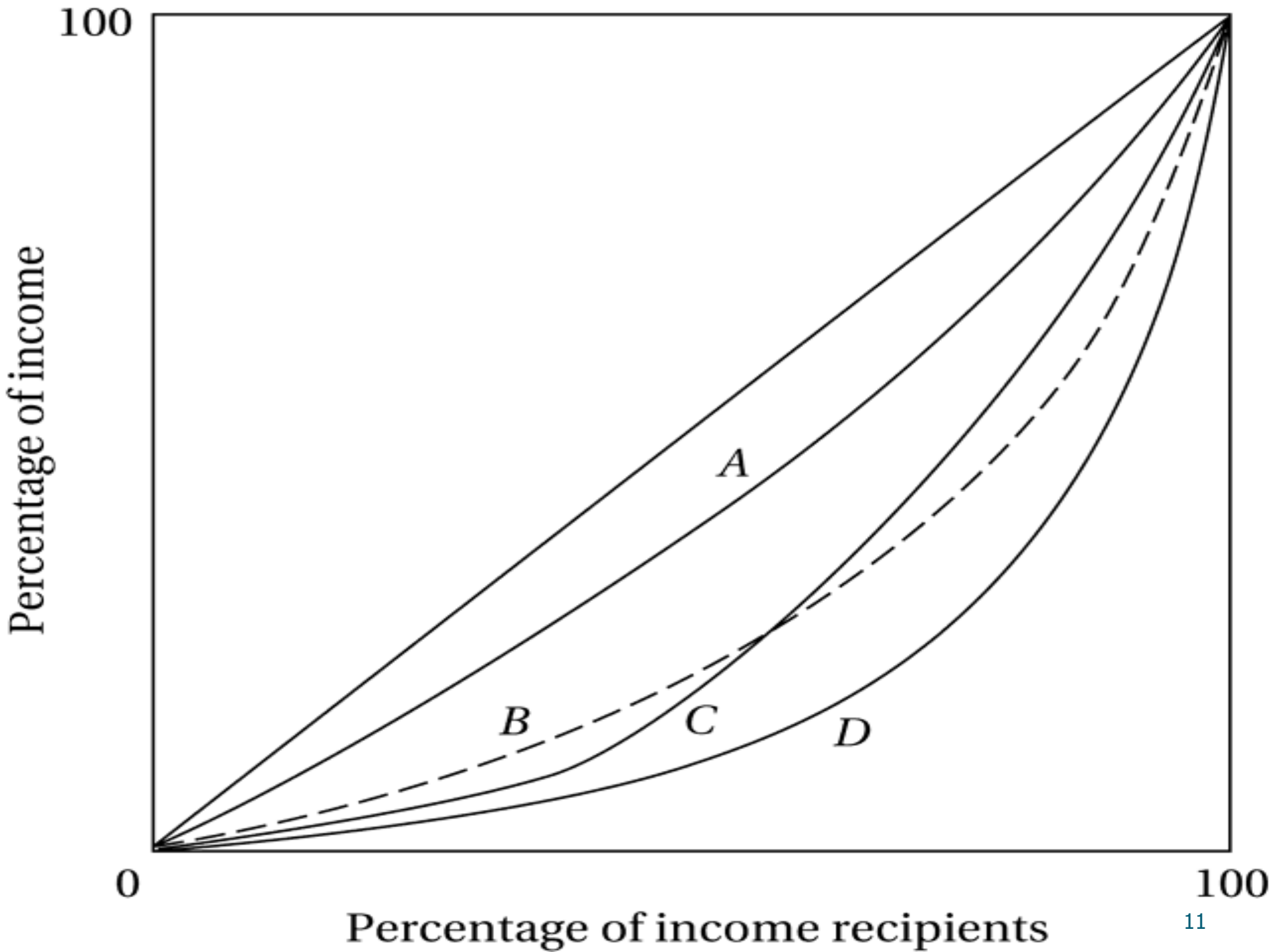


# Measuring Inequality

- Lorenz curves
  - Show the actual quantitative relationship between the percentage of income recipients and the percentage of total income they received during a time period (year)
  - Depict the variance of the size distribution of income from perfect equality

# Measuring Inequality

- Gini coefficient
  - Is measured graphically by dividing the area between the perfect equality line and the Lorenz curve by the total area lying to the right of the equality line in a Lorenz curve diagram
  - Ranges in value from 0 (perfect equality) to 1 (perfect inequality)
  - Satisfies the properties of anonymity, scale independence, population independence, and transfer principles



# Measuring Inequality

- Coefficient of Variation (CV)
  - Is sample SD divided by the sample mean also satisfies the properties of anonymity, scale independence, population independence, and transfer principles
- Functional distribution
  - Influence of non-market forces minimizes the application of this measure
- All inequality measures are measuring relative income

**TABLE 5.3** Per Capita Income and Inequality in Developing Countries, 1990s

Country	GNP Per Capita, 1996 (U.S. \$)	Income Share of Lowest 40% of Households	Ratio of Highest 20% to Lowest 20%	Gini Coefficient
Bangladesh	260	22.9	4.0	0.28
Kenya	320	10.1	18.3	0.58
Sri Lanka	740	22.0	4.4	0.30
Indonesia	1,080	20.4	5.1	0.34
Philippines	1,160	15.5	8.4	0.43
Jamaica	1,600	16.0	8.2	0.41
Paraguay	1,850	8.2	27.1	0.59
Costa Rica	2,640	12.8	12.9	0.47
Malaysia	4,370	12.9	11.7	0.48
Brazil	4,400	8.2	25.7	0.60

Source: World Bank, *World Development Indicators*, 1998 (Washington, D.C.: World Bank, 1998), tabs. 1.1 and 2.8.

# Measuring Absolute Poverty

- A situation where a population or sections of the population are able to maintain minimum levels of living (IPL)
- Absolute poverty is measured using
  - Headcount (H)
  - Headcount Index ( $H/N$ )
  - Poverty Gap (total income shortfall)
  - FGT Index has desirable properties of a poverty measure

# Measuring Absolute Poverty

- P2 measure is used as a standard poverty measure by the World Bank and most UN agencies
- The Human Poverty Index (HPI) is used by the UNDP and measures poverty as three key deprivations- survival, knowledge, and economic provisions

## Figure 2 Where poverty has fallen, and where it has not



Source: World Bank 2000s.



**TABLE 6.4** Population, Headcount Ratio, and Poverty Gap at the \$1 and \$2 Poverty Lines, Selected Countries

Economy	Population			International Poverty Line			
	Millions 2000	Avg. Annual % Growth 1990–2000	Survey Year	Population Below \$1 Day %	Poverty Gap at \$1 Day %	Population Below \$2 a Day %	Poverty Gap at \$2 Day %
Armenia	4	0.8	1996	7.8	1.7	34.0	11.3
Bangladesh	130	1.6	1996	29.1	5.9	77.8	31.8
Bolivia	8	2.4	1997	29.4	15.2	51.4	27.8
Botswana	2	2.3	1985–86	33.3	12.5	61.4	30.7
Brazil	170	1.4	1997	9.0	2.1	25.4	9.8
Burkina Faso	11	2.4	1994	61.2	25.5	85.8	50.9
Central African Republic	4	2.0	1993	66.6	38.1	84.0	58.4
China	1,261	1.1	1998	18.5	4.2	53.7	21.0
Colombia	42	1.9	1996	11.0	3.2	28.7	11.6
Costa Rica	4	2.0	1997	6.9	2.0	23.3	8.5
Côte d'Ivoire	16	3.0	1995	12.3	2.4	49.4	16.8
Dominican Republic	9	1.9	1996	3.2	0.7	16.0	5.0
Ecuador	13	2.1	1995	20.2	5.8	52.3	21.2
Egypt, Arab Rep.	64	2.0	1995	3.1	0.3	52.7	13.9
El Salvador	6	2.1	1997	26.0	9.7	54.0	25.3
Estonia	1	−0.9	1998	<2	<0.5	5.2	0.8
Ethiopia	64	2.3	1995	31.3	8.0	76.4	32.9
Ghana	19	2.6	1998	38.8	3.4	74.6	16.1
Guatemala	11	2.6	1998	10.0	2.2	33.8	11.8
Honduras	6	2.8	1996	40.5	17.5	68.8	36.9
Hungary	10	−0.3	1998	<2	<0.5	7.3	1.7
India	1,016	1.8	1997	44.2	12.0	86.2	41.4
Indonesia	210	1.7	1999	7.7	1.0	55.3	16.5
Jamaica	3	0.9	1996	3.2	0.7	25.2	6.9
Kazakhstan	15	−0.9	1996	1.5	0.3	15.3	3.9
Kenya	30	2.4	1994	26.5	9.0	62.3	27.5
Lao PDR	5	2.6	1997	26.3	6.3	73.2	29.6
Lesotho	2	2.2	1993	43.1	20.3	65.7	38.1
Madagascar	16	2.9	1997	63.4	26.9	89.0	53.2
Mali	11	2.5	1994	72.8	37.4	90.6	60.5
Mauritania	3	2.8	1995	28.6	9.1	68.7	29.6
Mexico	98	1.6	1996	12.2	3.5	34.8	13.2
Moldova	4	−0.2	1997	11.3	3.0	38.4	14.7

(continued)

# Characteristics of Poverty Groups

- Rural poverty
- Women and poverty
- Ethnic minorities and poverty

**TABLE 6.5** Rural Poverty as a Percentage of Total Poverty

Region and Country	Rural Population as a Percentage of the Total	Rural Poor as a Percentage of the Total
Sub-Saharan Africa		
Ghana	65	80
Ivory Coast	57	86
Kenya	80	96
Asia		
India	77	79
Indonesia	73	91
Malaysia	62	80
Philippines	60	67
Thailand	70	80
Latin America		
Guatemala	59	66
Mexico	31	37
Panama	50	59
Peru	44	52
Venezuela	15	20

Source: World Bank, *World Development Report, 1990: Poverty* (New York: Oxford University Press, 1990), tab. 2.2. Reprinted with permission.

**TABLE 6.6** Indigenous Poverty in Latin America

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Country	Percentage of Population below the Poverty Line	
	Indigenous	Nonindigenous
Bolivia	64.3	48.1
Guatemala	86.6	53.9
Mexico	80.6	17.9
Peru	79.0	49.7

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*Source:* George Psacharopoulos and Harry A. Patrinos, "Indigenous people and poverty in Latin America," *Finance and Development* 31 (March 1994): 41. Reprinted with permission.

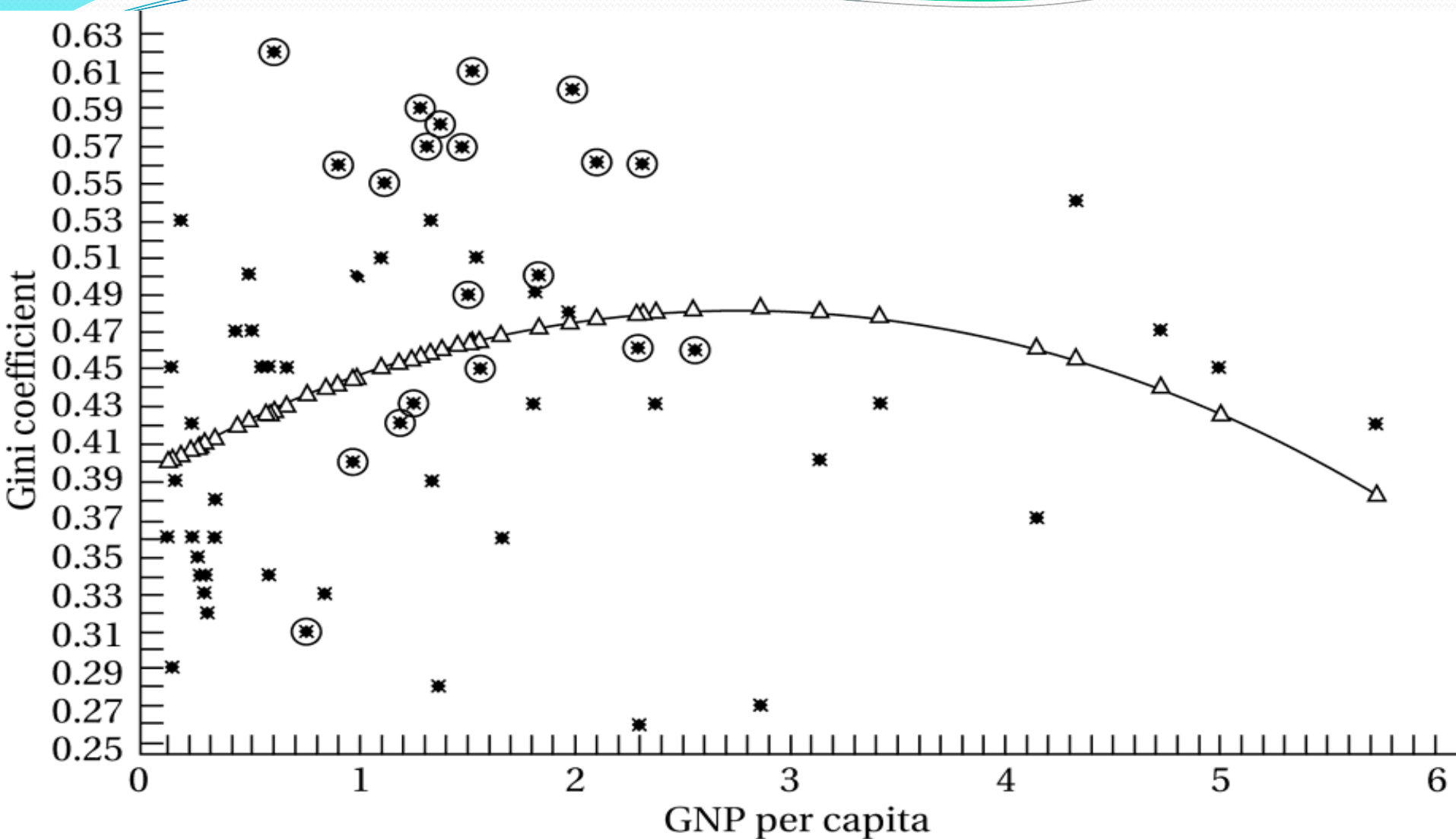
# Why is inequality bad?

- Extreme inequality leads to economic inefficiency and curtails growth
- Extreme inequality undermines social stability and solidarity
- Extreme inequality is viewed as unfair

# Kuznets' Inverted- U Hypothesis

- In the early stages of growth, distribution of income will tend to worsen, where as later stages it will improve
- Reasons for the inverted- U curve
- Evidence on the inverted U- hypothesis

## Kuznets Curve with Latin American Countries Identified



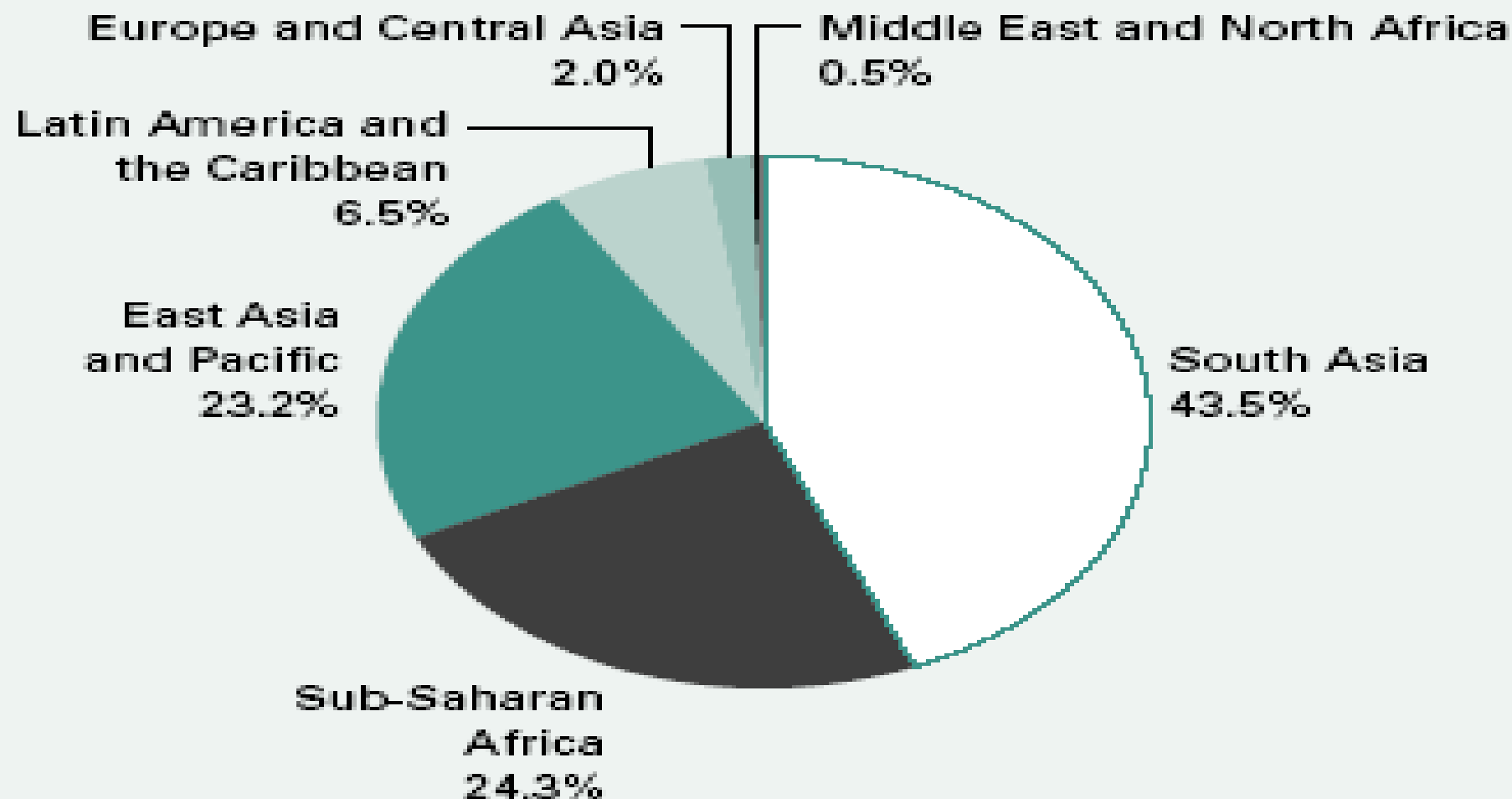
Star – Actual Data

Triangle – Predicted relationship

Circled – Latin American

# Where the developing world's poor live

**Distribution of population living on less than \$1 a day,  
1998 (1.2 billion)**



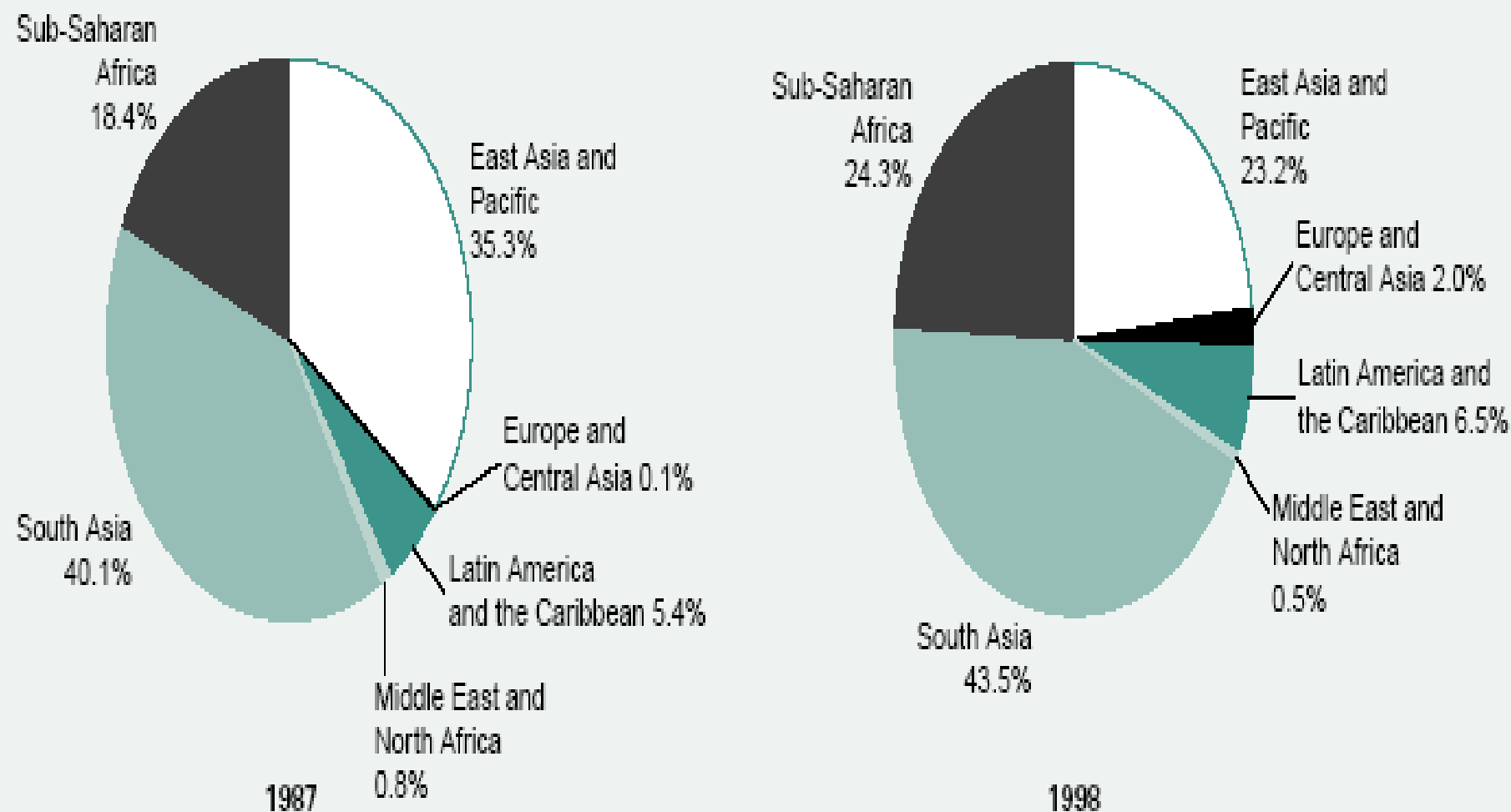
Source: World Bank 2000s.



Figure 1.1

## Poverty in the developing world is shifting toward South Asia and Sub-Saharan Africa

Distribution of population living on less than \$1 a day



Source: Chen and Ravallion 2000.

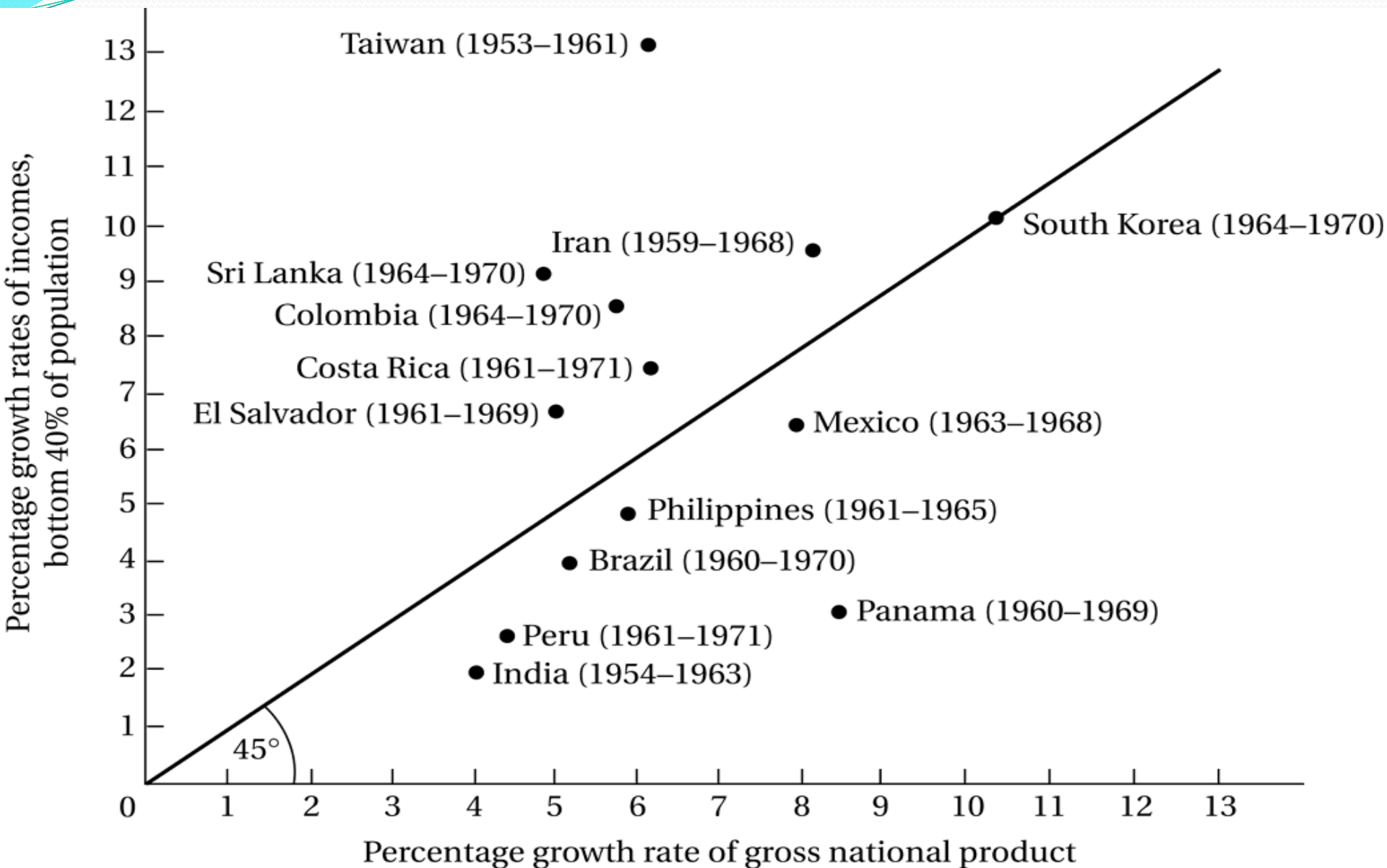
# Relation in conflict?

- Relation between economic growth and inequality
- Relation between economic growth and poverty
- Overview of inequality and growth in his paper "Inequality and Economic Performance." The paper is available at:  
<http://www.worldbank.org/poverty/inequal/econ/ferraira.pdf>
- Case study: Workfare as a Poverty Policy: The Bangladesh Food for Work Program at  
[http://wps.aw.com/wps/media/objects/277/284582/todaro\\_casestudies.pdf](http://wps.aw.com/wps/media/objects/277/284582/todaro_casestudies.pdf)

# inequality

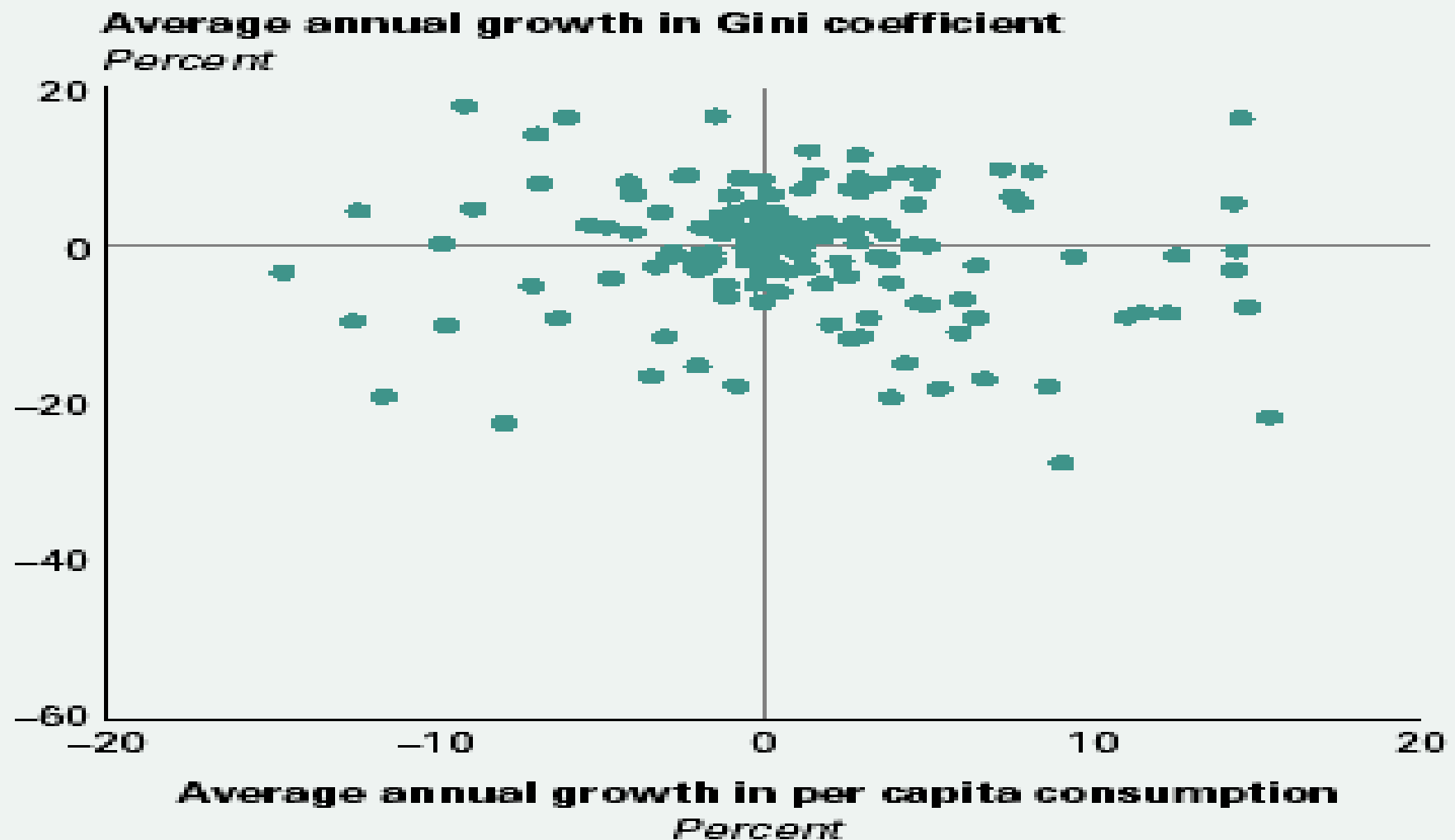
- Does growth affect the level of inequality?
  - No consensus
- Does initial inequality affect growth?
  - Negative relation between growth and initial inequality in income (refer to Why is inequality bad?)
  - Positive relation between growth and initial inequality (only Forbes found this relation)
  - Initial inequality in assets and human capital negatively affects growth (as it hurts the poor the most)
- *The main flow of causation appears to be initial inequality hampering growth and not the other way round.*

# Comparison of Gross National Product Growth Rates and Income Growth Rates of the Bottom 40% of the Population in Selected Less Developed Countries



**Figure 3.5**

**Inequality varied widely in the 1980s and 1990s but showed no systematic association with growth**



*Note:* The data cover 65 developing countries.

*Source:* World Bank staff estimates based on data from Chen and Ravallion (2000).

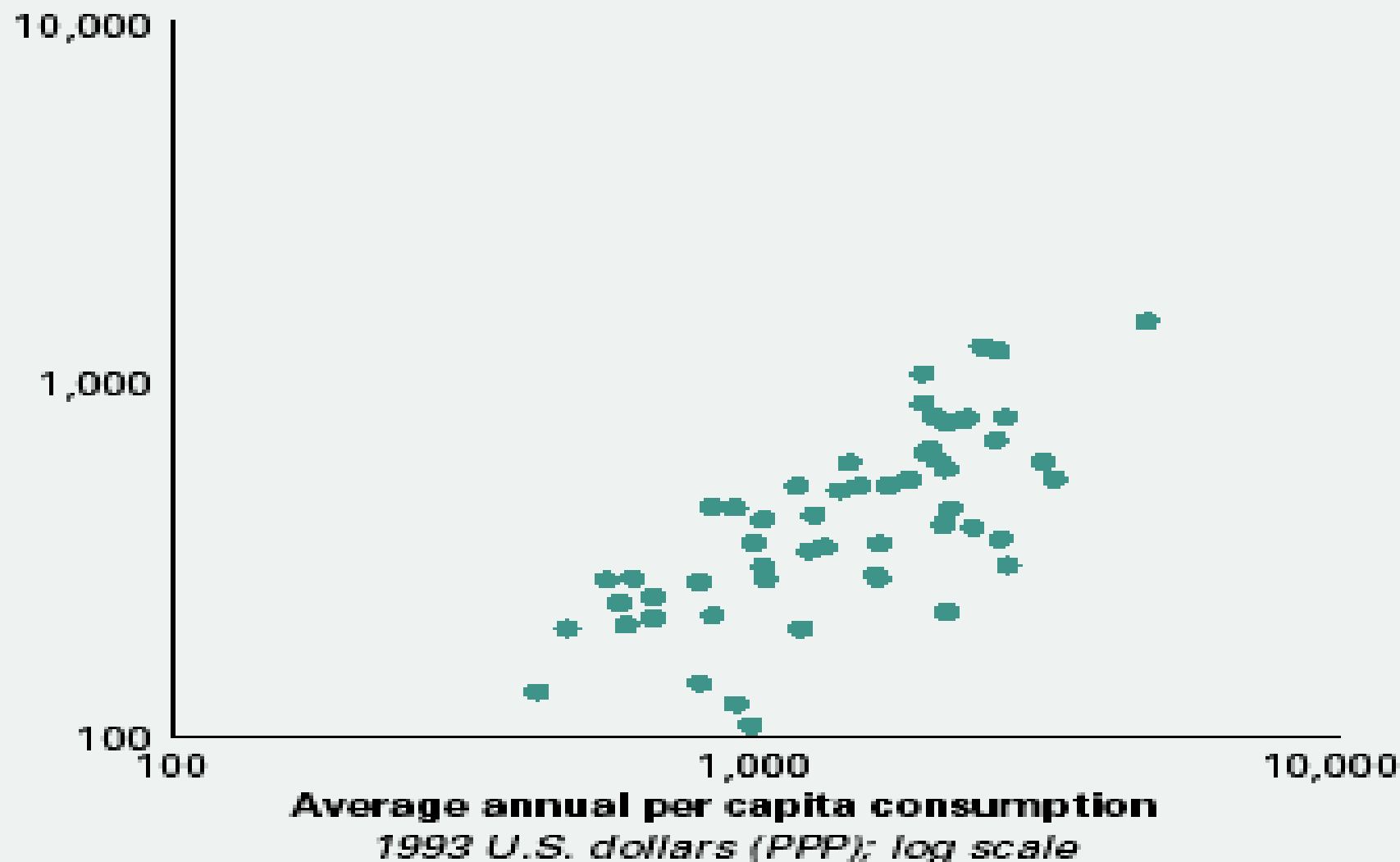
# Relation between economic growth and poverty

- Traditionally, it was considered that there is trade-off between growth and poverty.
- Why are similar rates of growth associated with different rates of poverty reduction?
  - Redistribution of growth benefits reduces poverty
  - Initial inequality in income enhances poverty
  - Sectoral composition of growth (agriculture versus modern, rural versus urban)
- *Efforts to reduce poverty lead to higher growth and higher growth leads to reduction in poverty.*

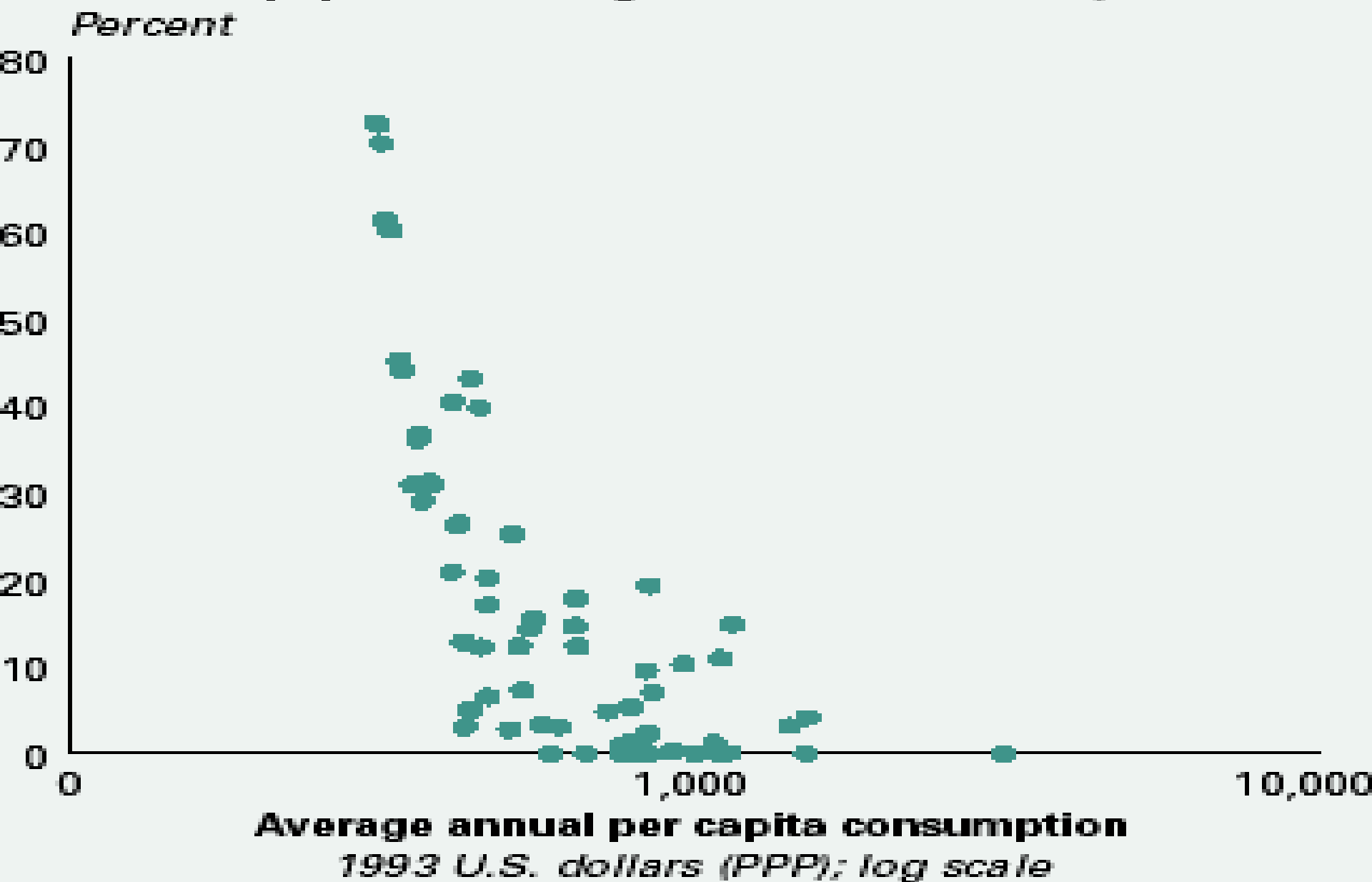
# In general, the wealthier a country, the lower the incidence of poverty

**Average annual per capita consumption of poorest fifth of population**

*1993 U.S. dollars (PPP); log scale*



# Share of population living on less than \$1 a day



Note: The data cover 65 developing countries and refer to various years in the 1990s.



- Policy Options- refer pp.236- 242 from the textbook for the course and the case study
- Altering the functional distribution of income through policies designed to change relative factor prices
  - Removal of factor price distortions
- Modifying the size distribution through progressive redistribution of asset ownership
  - Redistribution policies such as land reform

- Reducing the size distribution at the upper levels through progressive income and wealth taxes
  - Direct progressive income taxes
  - Indirect taxes
- Direct transfer payments and the public provision of goods and services
  - Workfare programs superior to welfare and handouts.



**THANK YOU**