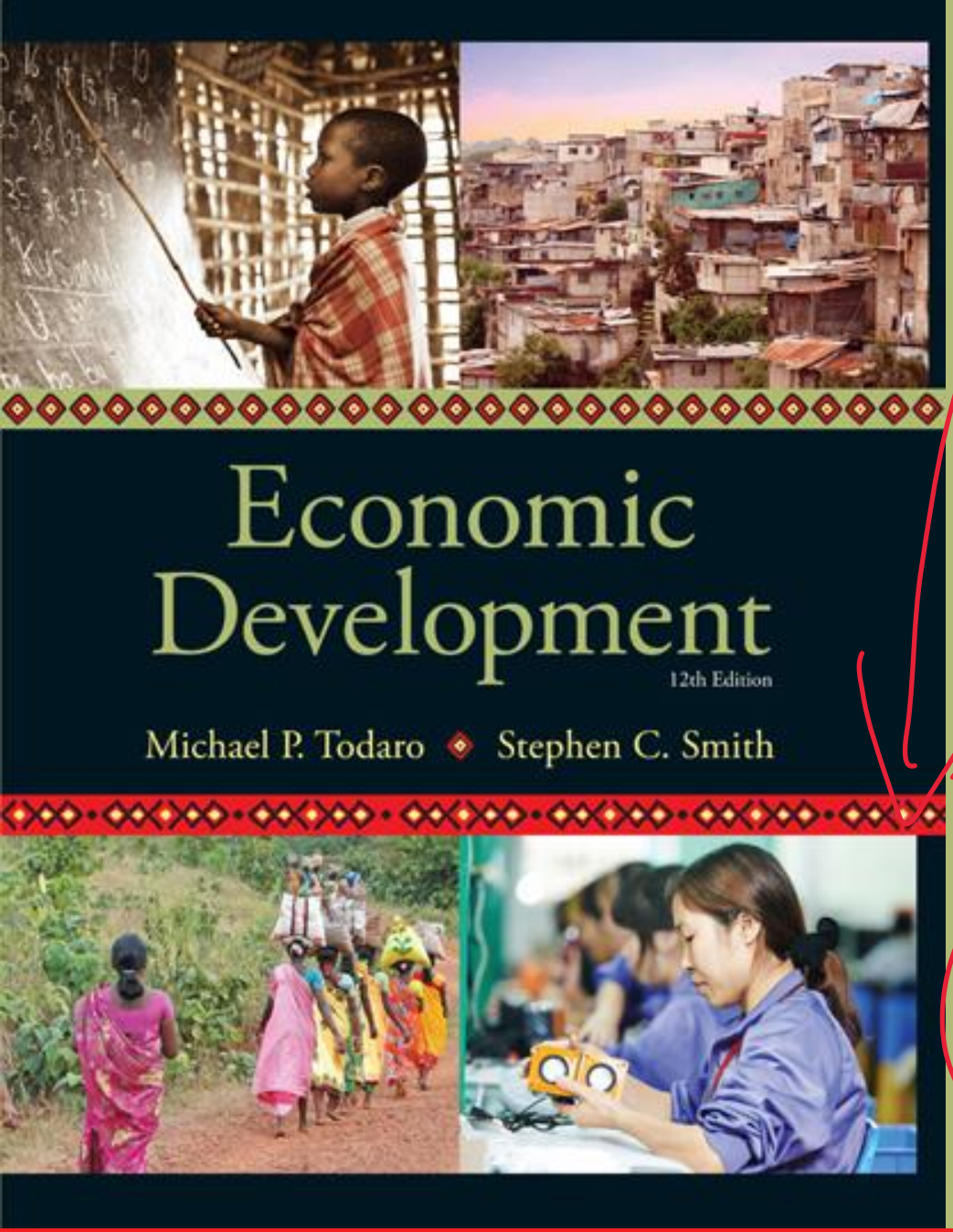


Chapter 5

Poverty, Inequality, and Development

Distribution and Development: Eight Critical Questions

- How can we best measure inequality and poverty?
- What is the extent of relative inequality in developing countries; how is this related to the extent of poverty?
- Who are the poor, and what are their economic characteristics?
- What determines the nature of economic growth—that is, who benefits from economic growth, and why?

left behinds

Distribution and Development: Eight Critical Questions

- Are rapid economic growth and more equal income distribution compatible or conflicting objectives?: Is rapid growth achievable only at a cost of greater income inequality or can lessening income disparities contribute to higher growth rates?
- Do the poor benefit from growth, and does this depend on the type of growth a developing country experiences? What might be done to help the poor benefit more?
- What is so bad about extreme inequality?
- What kinds of policies are required to reduce the magnitude and extent of absolute poverty?

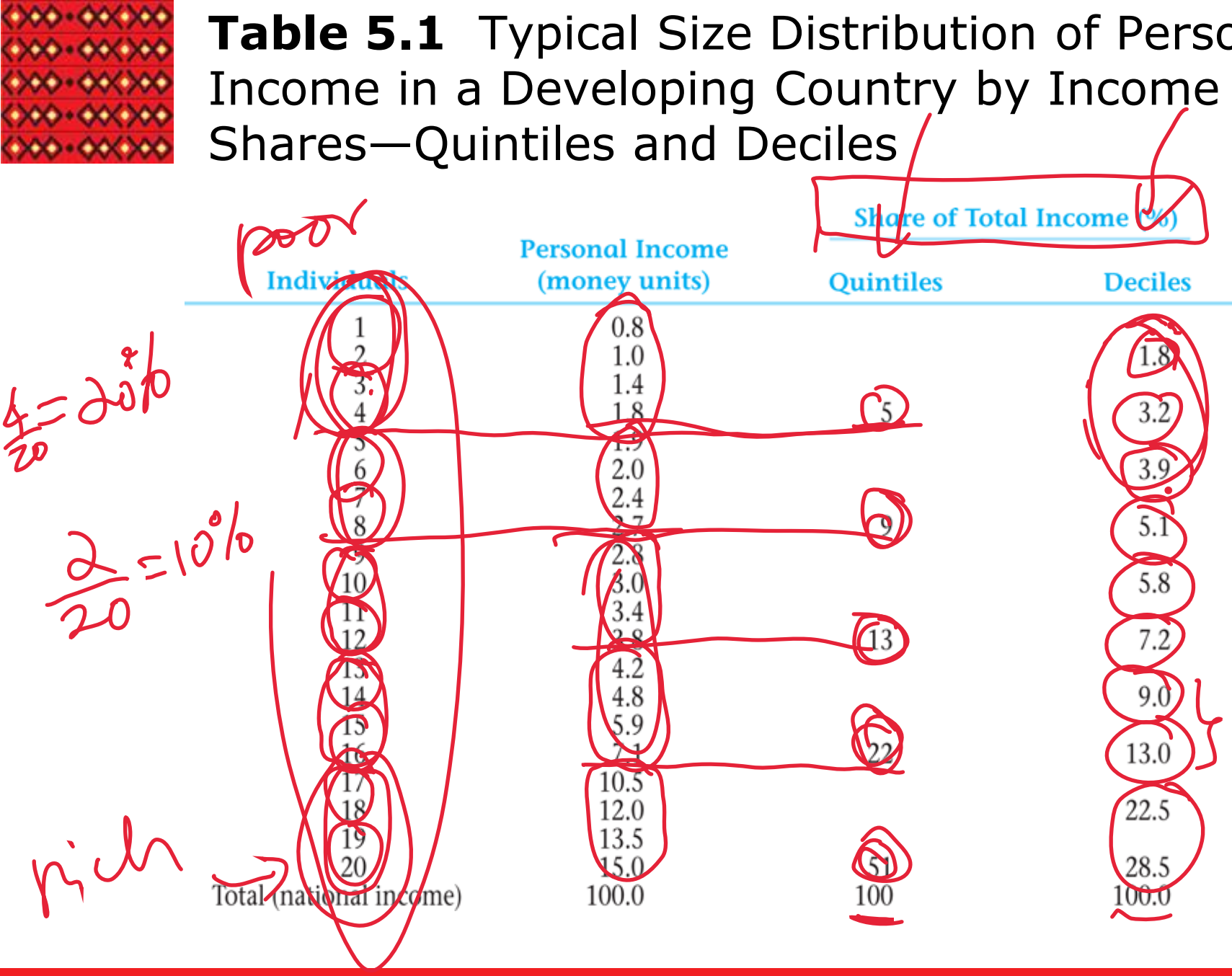
5.1 Measuring Inequality

- Measuring Inequality
  - Size distributions (quintiles, deciles)
  - Lorenz curves
  - Gini coefficients and aggregate measures of inequality
  - Functional distributions

Desirable Properties for Inequality Measures

- Anonymity: measure should not depend on who has higher income; e.g. whether we believe the rich or poor to be good or bad people
- Scale independence: inequality measures should not depend on size of the economy – want a measure of income dispersion
- Population independence principle: an inequality measure should not be based on the number of income recipients
- Transfer principle - all other incomes constant, if transfer income from a richer to a poorer person (not so much that the poorer person is now richer than the originally rich person), resulting new income distribution is more equal.
- Gini coefficient satisfies all four properties; so does the coefficient of variation (CV), and some others

Table 5.1 Typical Size Distribution of Personal Income in a Developing Country by Income Shares—Quintiles and Deciles



Individuals	Personal Income (money units)	Share of Total Income (%) Quintiles	Deciles
1	0.8		1.8
2	1.0		
3	1.4		3.2
4	1.8	5	
5	1.9		3.9
6	2.0		
7	2.4		5.1
8	2.7	9	
9	2.8		5.8
10	3.0		
11	3.4		7.2
12	3.8	13	
13	4.2		9.0
14	4.8		
15	5.9		13.0
16	7.1	22	
17	10.5		22.5
18	12.0		
19	13.5		28.5
20	15.0	51	
Total (national income)	100.0	100	100.0

Figure 5.1 The Lorenz Curve

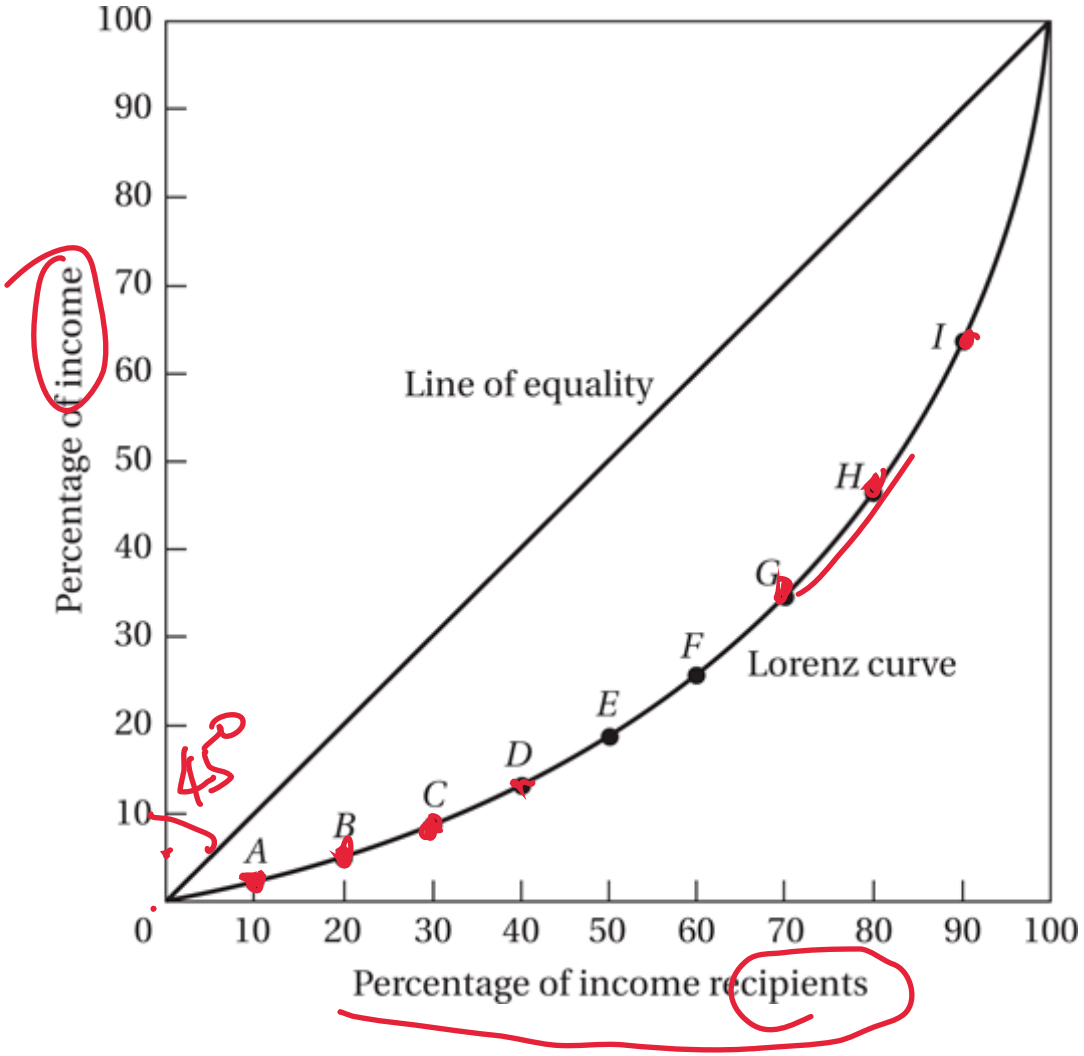
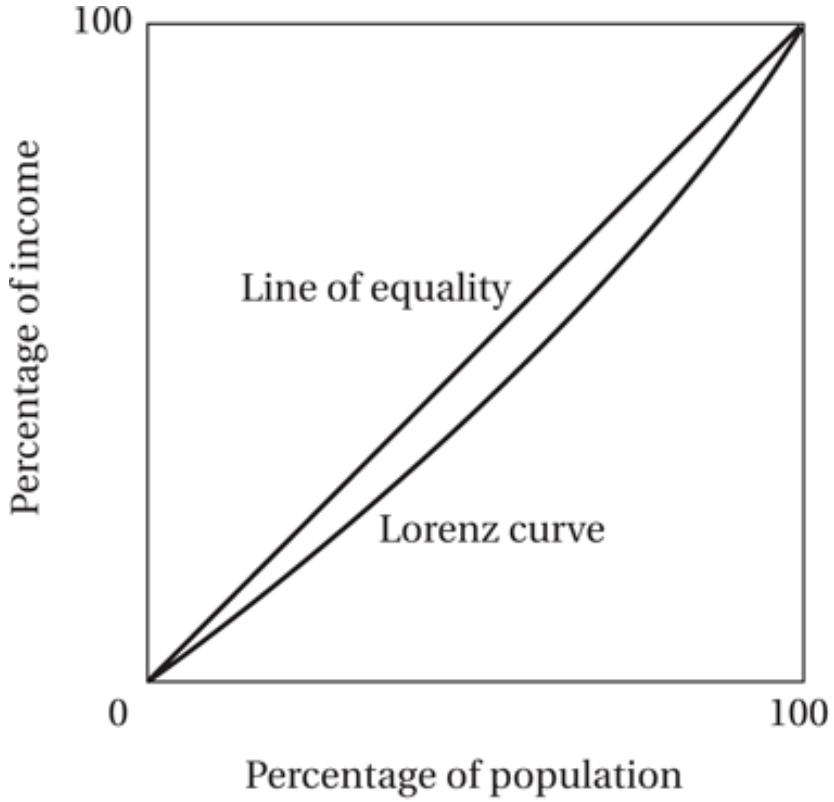
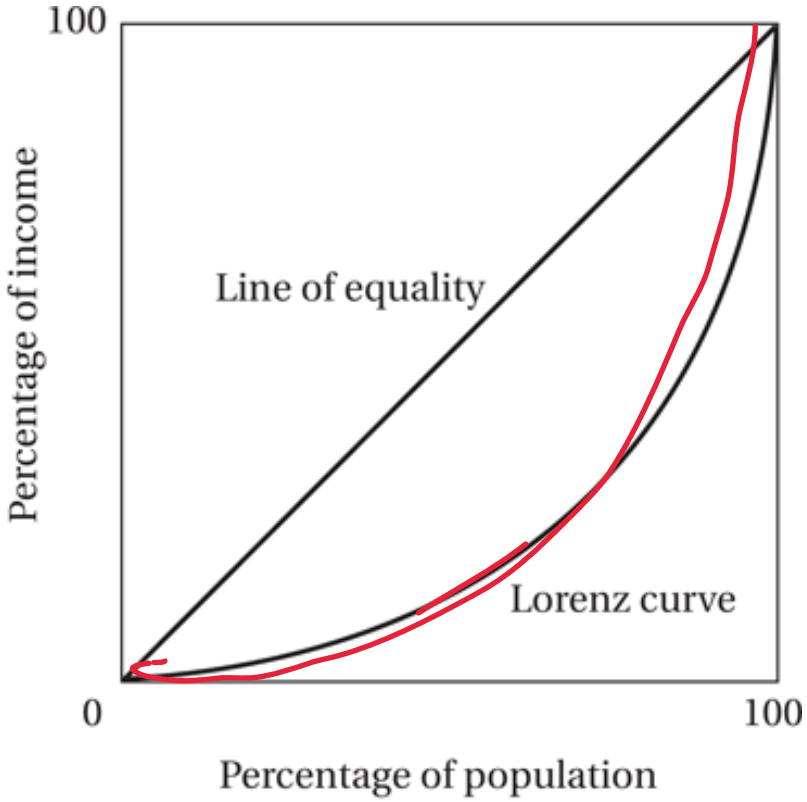


Figure 5.2 The Greater the Curvature of the Lorenz Line, the Greater the Relative Degree of Inequality



(a) A relatively equal distribution



(b) A relatively unequal distribution

Figure 5.3 Estimating the Gini Coefficient

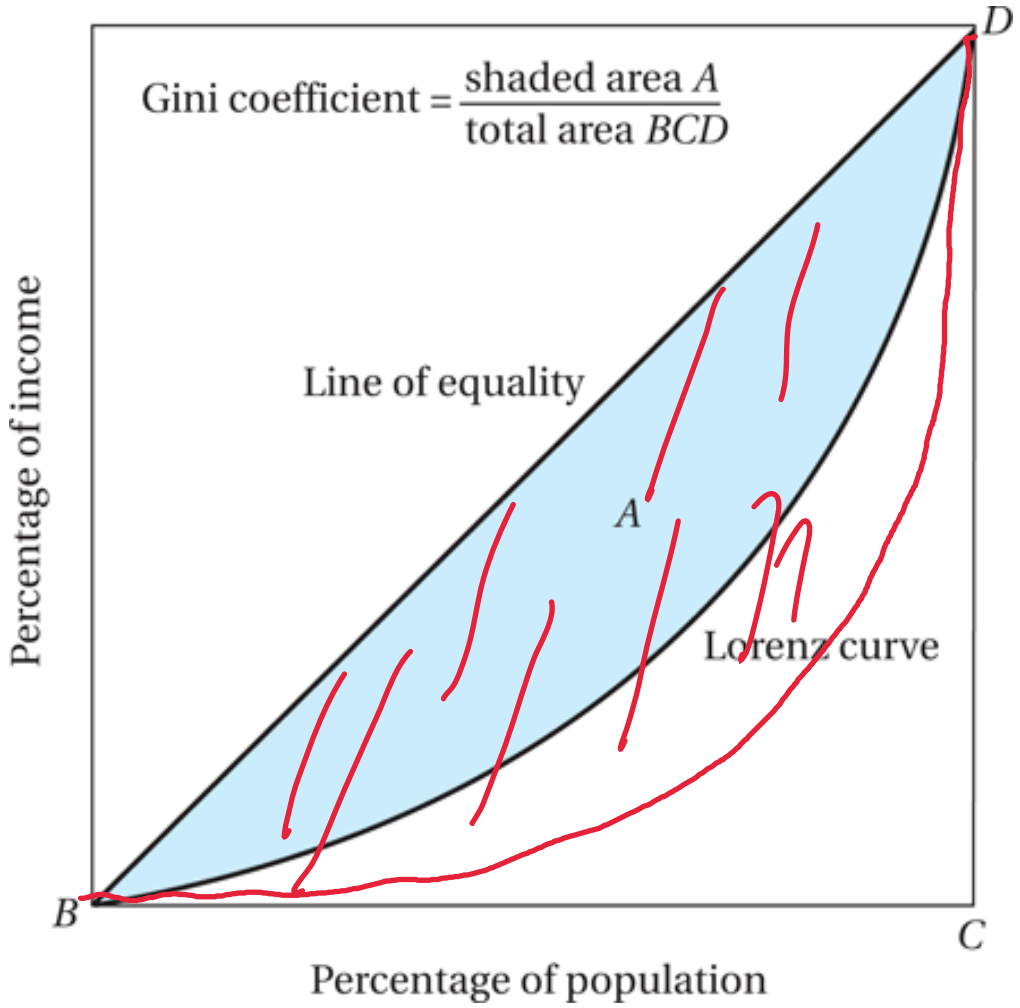


Figure 5.4 Four Possible Lorenz Curves

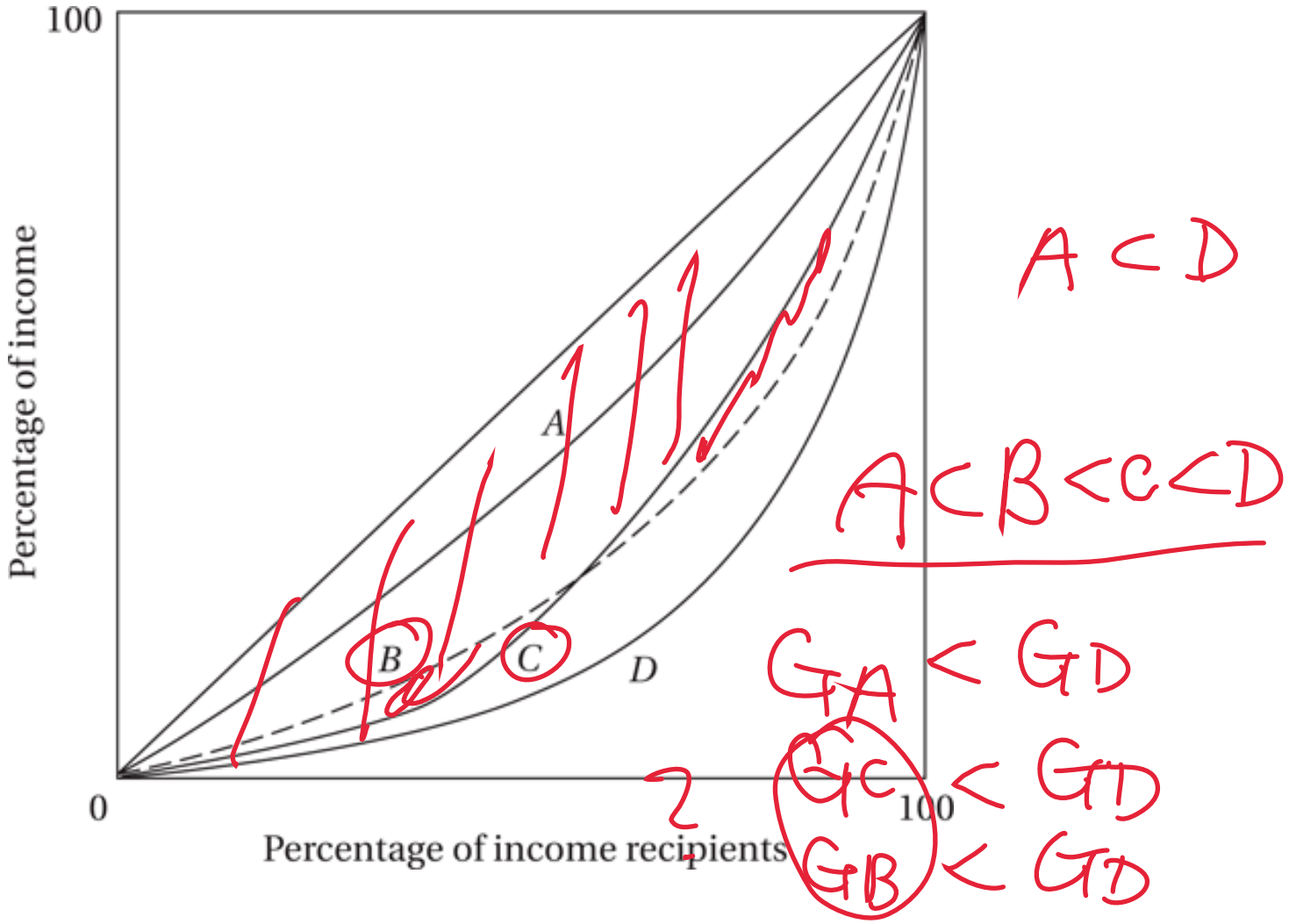
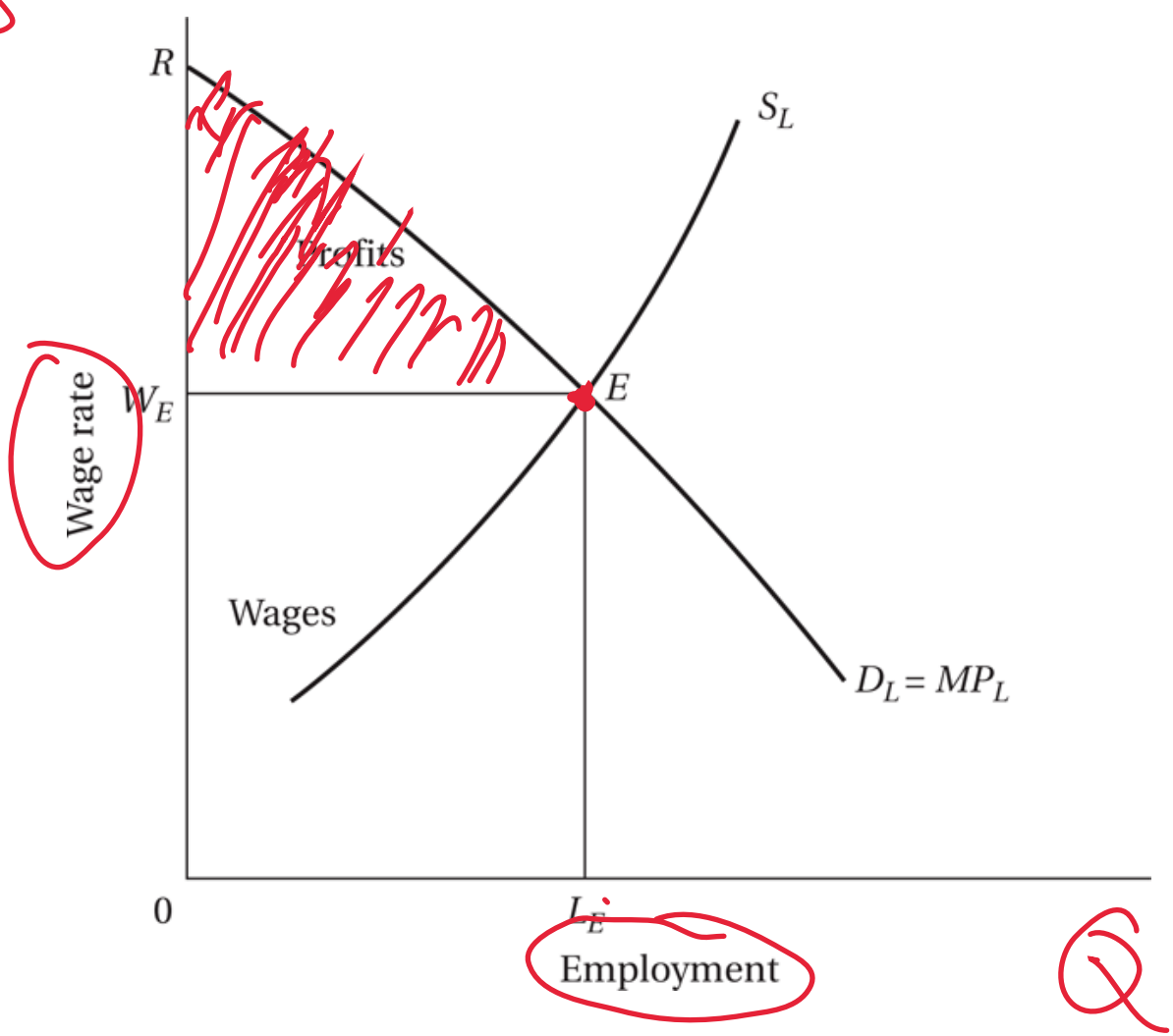


Figure 5.5 Functional Income Distribution in a Market Economy: An Illustration



5.2 Measuring Absolute Poverty

- Headcount Index: H/N $= P_0$
  - Where H is the number of persons who are poor and N is the total number of people in the economy
- Total poverty gap:

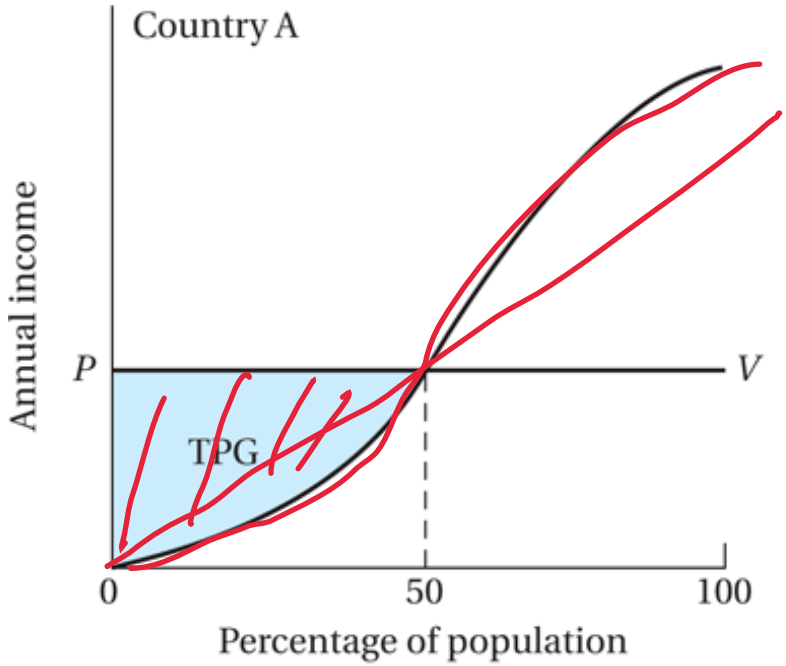
$$TPG = \sum_{i=1}^{H} (Y_p - Y_i)$$

  - Where Y_p is the absolute poverty line; and Y_i the income of the ith poor person

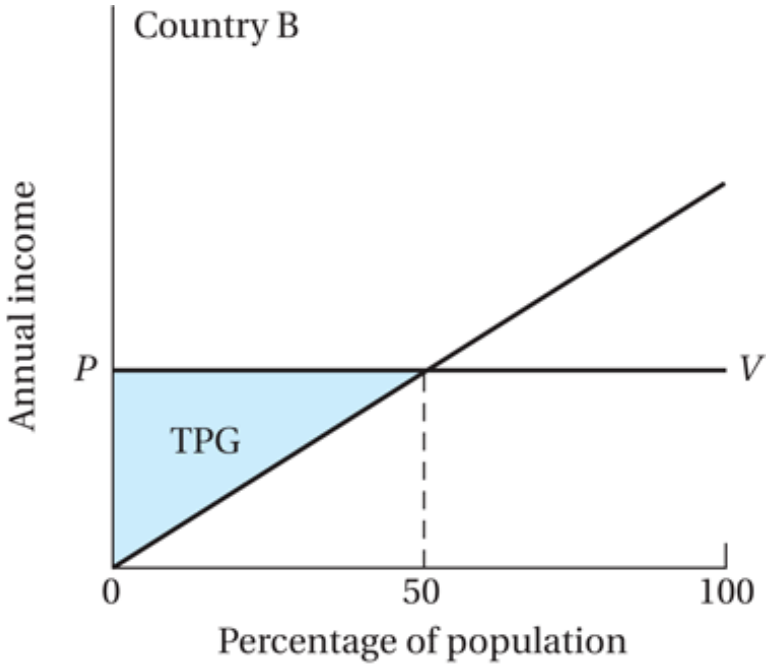
Desirable Properties for Inequality Measures

- Desirable properties for poverty measures:
  - Anonymity
  - Population independence
  - Monotonicity
  - Distributional sensitivity
- Plus: the Focus Principle
- As we will see, P_2 has these properties

Figure 5.6 Measuring the Total Poverty Gap



(a) A relatively large poverty gap



(b) A relatively small poverty gap

5.2 Measuring Absolute Poverty

- Average poverty gap (APG):

$$APG = \frac{TPG}{N}$$

  - Where N is number of persons in the economy
  - TPG is total poverty gap
  - Note: normalized poverty gap, NPG = APG/Y_p

5.2 Measuring Absolute Poverty

- Measuring Absolute Poverty
  - Average income shortfall (AIS):

$$AIS = \frac{TPG}{H}$$

  - Where H is number of poor persons
  - TPG is total poverty gap
  - Note: Normalized income shortfall, NIS = AIS/Y_p

5.2 Measuring Absolute Poverty

- The Foster-Greer-Thorbecke (FGT) index:

$$P_\alpha = \frac{1}{N}\sum_{i=1}^{H}\left(\frac{Y_p - Y_i}{Y_p}\right)^\alpha$$

  - *N* is the number of persons, *H* is the number of poor persons, and $\alpha \geq 0$ is a parameter
  - When $\alpha=0$, we get the headcount index measure
  - When $\alpha=2$, we get the "P_2" measure

$$P_0 = \frac{H}{N}$$

$$P_2 = \frac{1}{N}\sum_{i=1}^{H}\left(\frac{Y_p - Y_i}{Y_p}\right)^2$$

5.2 Measuring Absolute Poverty

- The Newly Introduced Multidimensional Poverty Index

Measuring Poverty: Income or Multidimensional?

- Given that we are measuring poverty with income, we have good measures that, like P2, satisfies desirable properties
- If must have a single indicator, income has advantages e.g. clarity, flexibility
- But in general is measuring income sufficient?
- Following Amartya Sen's capability approach, it is apparent that, in general, poverty needs to be conceptualized – and so measured – in a multidimensional way
- We will return to this with the new MPI

5.3 Poverty, Inequality, and Social Welfare

- What's So Bad about Extreme Inequality?
- Dualistic Development and Shifting Lorenz Curves: Some Stylized Typologies
  - Traditional-sector enrichment (see Figure 5.7)
  - Modern-sector enrichment (see Figure 5.8)
  - Modern-sector enlargement (see Figure 5.9)

Figure 5.7 Improved Income Distribution under the Traditional-Sector Enrichment Growth Typology

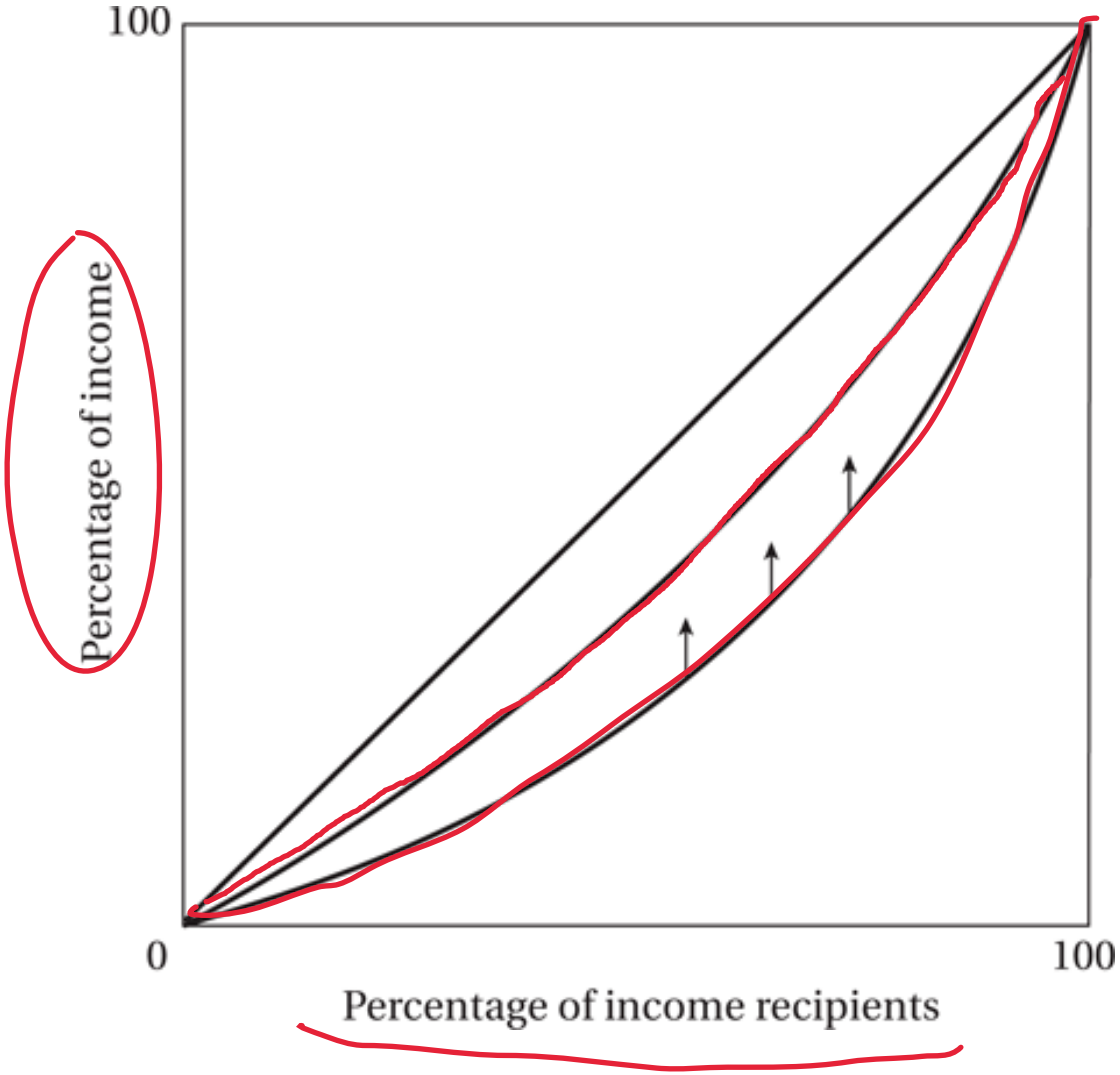


Figure 5.8 Worsened Income Distribution under the Modern-Sector Enrichment Growth Typology

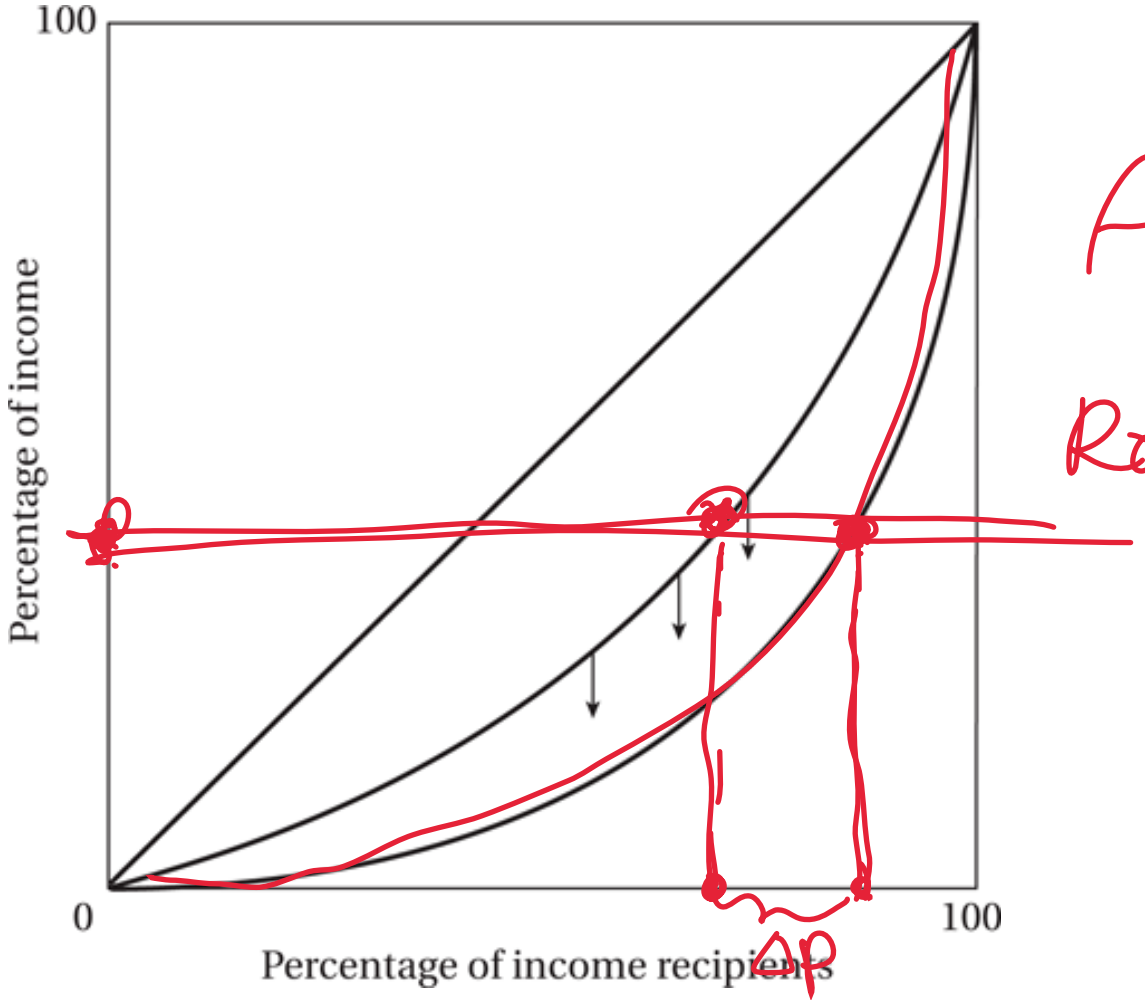
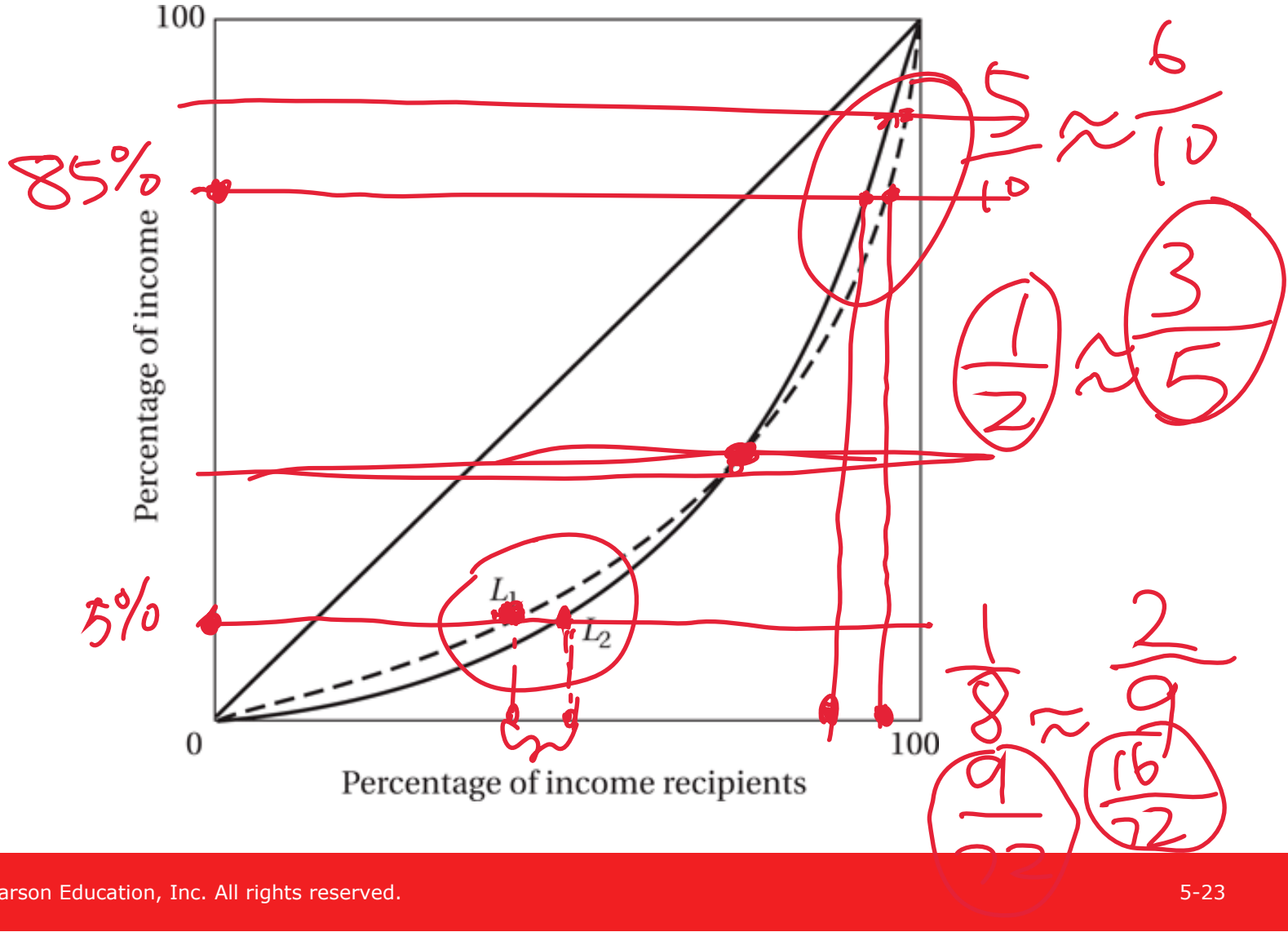


Figure 5.9 Crossing Lorenz Curves in the Modern-Sector Enlargement Growth Typology



5.3 Poverty, Inequality, and Social Welfare

- Kuznets' Inverted-U Hypothesis
- The inverted-U is consistent with modern sector enlargement growth, but not traditional or modern sector enrichment growth

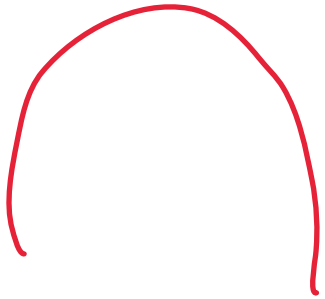


Figure 5.10 The "Inverted-U" Kuznets Curve

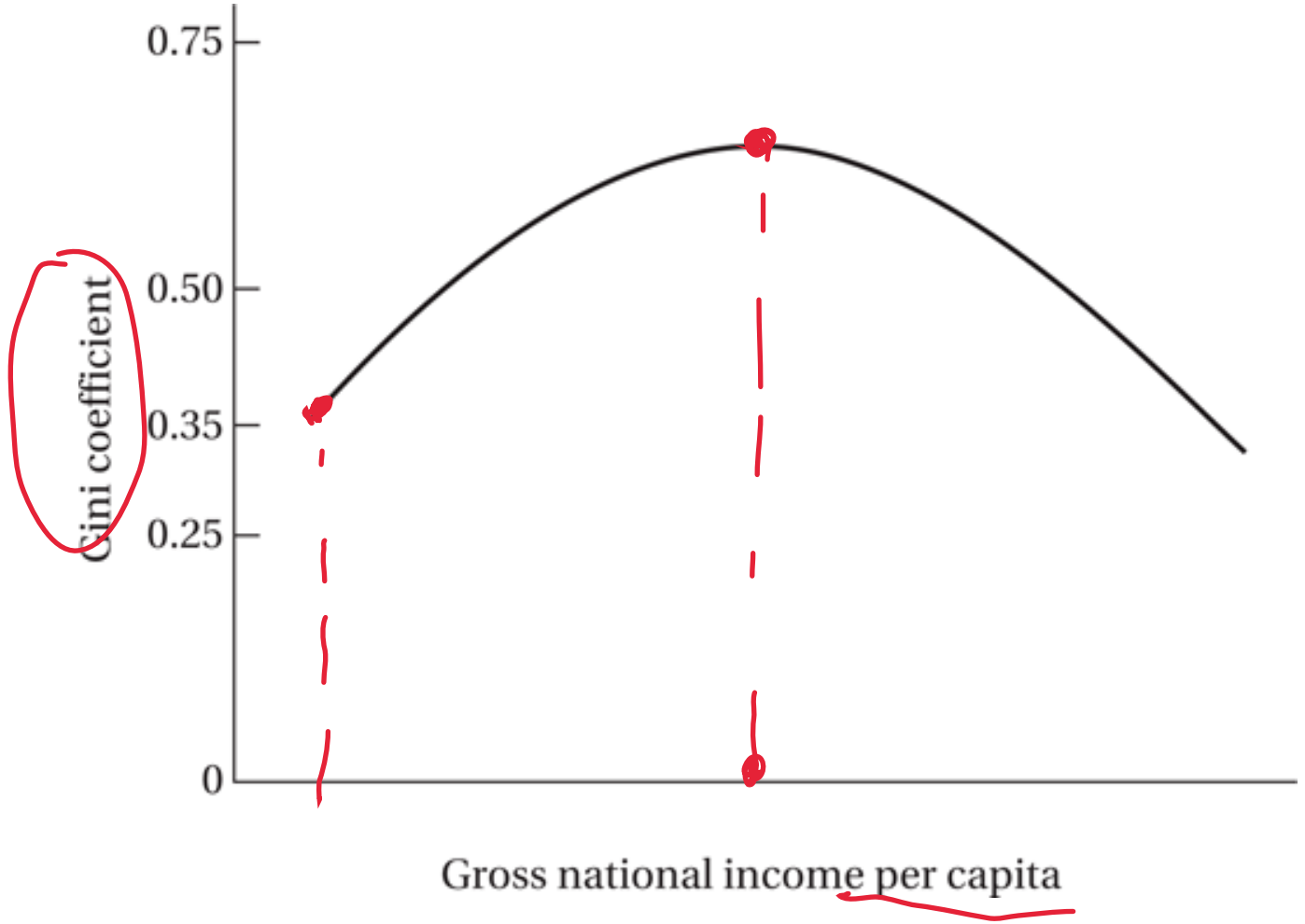
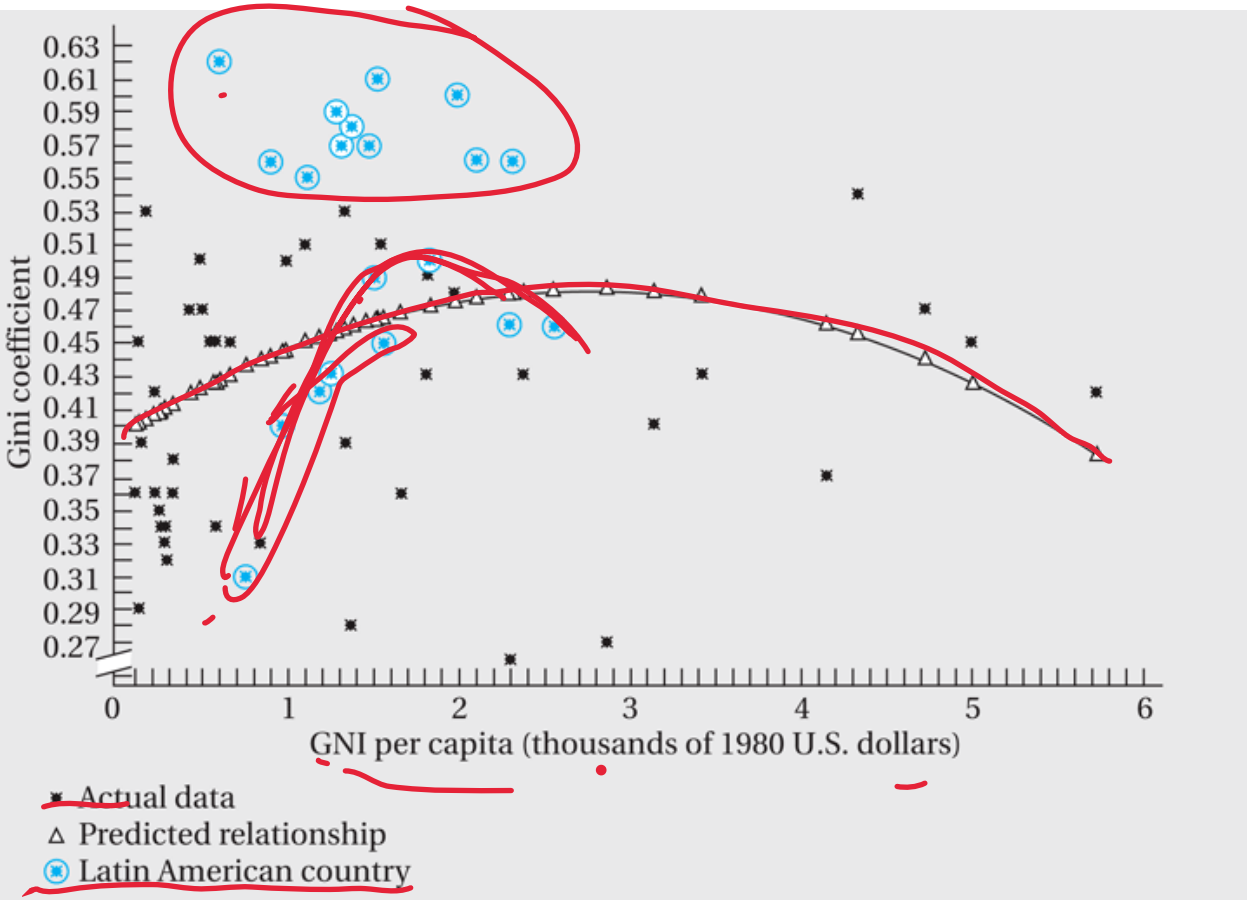


Table 5.2 Selected Income Distribution Estimates

Country	Lowest 10%	Quintile 1st	Quintile 2nd	Quintile 3rd	Quintile 4th	Quintile 5th	Highest 10%	Year
Bangladesh	4.3	9.4	12.6	16.1	21.1	40.8	26.6	2005
Brazil	1.1	3.0	6.9	11.8	19.6	58.7	43.0	2007
China	2.4	5.7	9.8	14.7	22.0	47.8	31.4	2005
Colombia	0.8	2.3	6.0	11.0	19.1	61.6	45.9	2006
Costa Rica	1.6	4.4	8.5	12.7	19.7	54.6	38.6	2007
Guatemala	1.3	3.4	7.2	12.0	19.5	57.8	42.4	2006
Honduras	0.7	2.5	6.7	12.1	20.4	58.4	42.2	2006
India	3.6	8.1	11.3	14.9	20.4	45.3	31.1	2005
Jamaica	2.1	5.2	9.0	13.8	20.9	51.2	35.6	2004
Namibia	0.6	1.5	2.8	5.5	12.0	78.3	65.0	1993
Pakistan	3.9	9.1	12.8	16.3	21.3	40.5	26.5	2005
Peru	1.3	3.6	7.8	13.0	20.8	54.8	38.4	2007
Philippines	2.4	5.6	9.1	13.7	21.2	50.4	33.9	2006
South Africa	1.3	3.1	5.6	9.9	18.8	62.7	44.9	2000
Tanzania	3.1	7.3	11.8	16.3	22.3	42.3	27.0	2001
Zambia	1.3	3.6	7.8	12.8	20.6	55.2	38.9	2005
Japan	4.8	10.6	14.2	17.6	22.0	35.7	21.7	1993
United States	1.9	5.4	10.7	15.7	22.4	45.8	29.9	2000

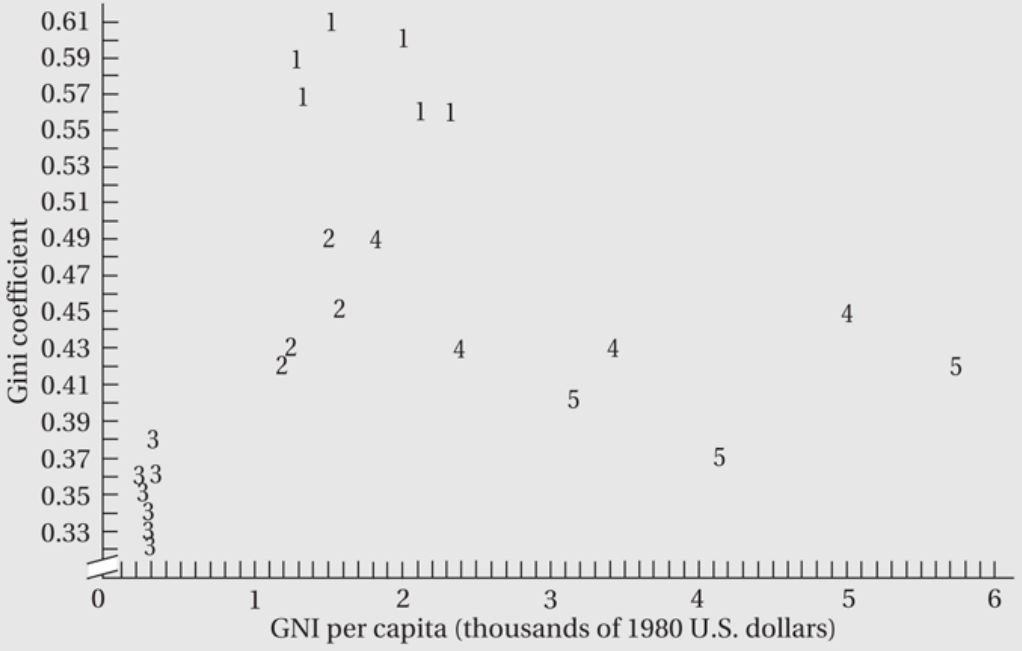
Source: based on World Bank, *World Development Indicators, 2010*. (Washington, D.C.: World Bank, 2010), tab. 2.9.

Figure 5.11 Kuznets Curve with Latin American Countries Identified



Source: Gary S. Fields, *Distribution and Development: A New Look at the Developing World* (Cambridge, Mass.: MIT Press, 2001), ch. 3, p. 46. © 2001 Massachusetts Institute of Technology, by permission of The MIT Press.

Figure 5.12 Plot of Inequality Data for Selected Countries



Source: Gary S. Fields, *Distribution and Development: A New Look at the Developing World* (Cambridge, Mass.: MIT Press, 2001), ch. 3, p. 44. © 2001 Massachusetts Institute of Technology, by permission of The MIT Press.

Table 5.3 Income and Inequality in Selected Countries

Country	Income Per Capita (U.S. $, 2008)	Gini Coefficient	Survey Year for Gini Calculation
Low Income			
Ethiopia	280	29.8	2005
Mozambique	380	47.1	2003
Nepal	400	47.3	2004
Cambodia	640	40.7	2007
Zambia	950	50.7	2005
Lower Middle Income			
India	1,040	36.8	2005
Cameroon	1,150	44.6	2001
Bolivia	1,460	57.2	2007
Egypt	1,800	32.1	2005
Indonesia	1,880	37.6	2007
Upper Middle Income			
Namibia	4,210	74.3	1993
Bulgaria	5,490	29.2	2003
South Africa	5,820	57.8	2000
Argentina	7,190	48.8	2006
Brazil	7,300	55.0	2007
Mexico	9,990	51.6	2008
Upper Income			
Hungary	12,810	30.0	2004
Spain	31,930	34.7	2000
Germany	42,710	28.3	2000
United States	47,930	40.8	2000
Norway	87,340	25.8	2000

Source: data from World Bank, *World Development Indicators, 2010* (Washington, D.C.: World Bank, 2010), tabs. 1.1 and 2.9.

5.3 Poverty, Inequality, and Social Welfare

- Growth and Inequality

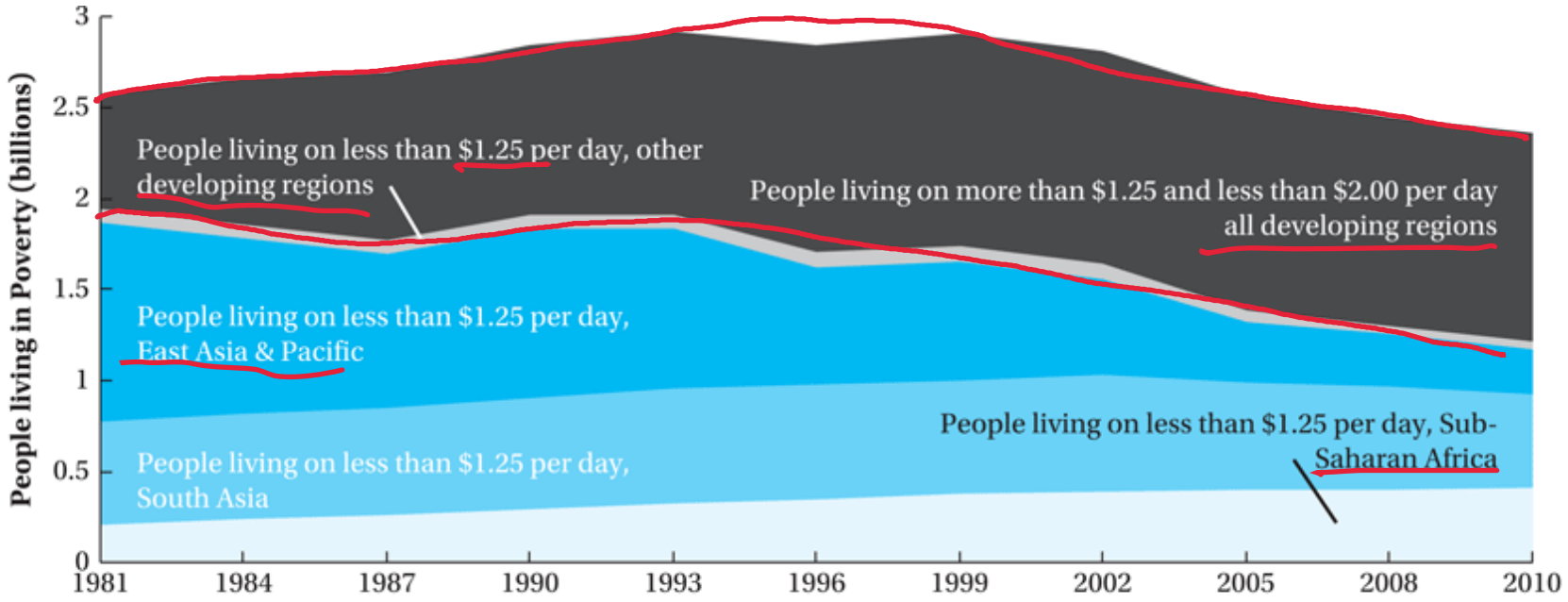
5.4 Absolute Poverty: Extent and Magnitude

- Progress on Extreme Poverty
  - Clear progress on $1.25-a-day headcount
  - Less clear progress on $2.00-per-day headcount (see Figure 5.14)
  - Incidence of extreme poverty is uneven
- Relationship between Growth and Poverty
  - Association between growth and poverty reduction
  - When it is inclusive, growth reduces poverty
  - Lower extreme poverty may also lead to higher growth

5.4 Absolute Poverty: Extent and Magnitude

- Poor health, nutrition, and education lowers economic productivity of people in poverty, leading directly and indirectly to slower growth
- Higher income for the poor raises demand for locally produced goods
- Often, the poor lack access to credit, which constrains entrepreneurship, children's education, and fertility reduction
- Social exclusion/injustice associated with poverty also leads to bad government policies that can reduce growth

Figure 5.13 Global and Regional Poverty Trends, 1981–2010



Source: Figure drawn using data from PovcalNet/World Bank; data downloaded 13 February 2014 from http://iresearch.worldbank.org/PovcalNet/index.htm?1.

Table 5.4 Regional Poverty Incidence, 2010

Region	Headcount Ratio (P_0)	Poverty Gap (P_1)	Squared Poverty Gap (P_2)
Regional Aggregation at $1.25 per Day			
East Asia and the Pacific	12.48	2.82	0.93
Europe and Central Asia	0.66	0.21	0.13
Latin America and the Caribbean	5.53	2.89	2.12
Middle East and North Africa	2.41	0.55	0.23
South Asia	31.03	7.09	2.36
Sub-Saharan Africa	48.47	20.95	11.85
Total	20.63	6.3	2.92
Regional Aggregation at $2 per Day			
East Asia and the Pacific	29.14	9.42	4.05
Europe and Central Asia	2.27	0.64	0.3
Latin America and the Caribbean	10.18	4.67	3.13
Middle East and North Africa	11.55	2.66	0.99
South Asia	65.8	22.86	10.19
Sub-Saharan Africa	69.31	35.22	22.03
Total	40.08	15.32	7.79

Source: data from World Bank, "PovcalNet," http://iresearch.worldbank.org/PovcalNet, accessed 13 February 2014.

The Multidimensional Poverty Index (MPI)

- Identification of poverty status through a *dual cutoff*:
- First, cutoff levels within each dimension (analogous to falling below a poverty line for example $1.25 per day for income poverty);
- Second, cutoff in the number of dimensions in which a person must be deprived (below a line) to be deemed *multidimensionally* poor.
- MPI focuses on deprivations in health, education, and standard of living; and each receives equal (that is one-third of the overall total) weight.

MPI Indicators

- Health - two indicators with equal weight - whether any child has died in the family, and whether any adult or child in the family is malnourished –weighted equally (each counts as one-sixth toward the maximum deprivation in the MPI)
- Education - two indicators with equal weight - whether no household member completed 5 years of schooling, and whether any school-aged child is out of school for grades 1 through 8 (each counts one-sixth toward the MPI).
- Standard of Living, equal weight on 6 deprivations (each counts as 1/18 toward the maximum): lack of electricity; insufficiently safe drinking water; inadequate sanitation; inadequate flooring; unimproved cooking fuel; lack of more than one of 5 assets – telephone, radio, TV, bicycle, and motorbike.

Interaction of the deprivations?

- Building the index from household measures up to the aggregate measure (rather than using already-aggregated statistics), MPI approach takes account of multiplied or interactive harm (complementarity) done when multiple deprivations are experienced by the *same individual or family*
- The MPI approach assumes an individual's lack of capability in one area can only to a degree be made up by other capabilities – capabilities are treated as substitutes up to a point but then as complements.

Computing the MPI

- The MPI for the country (or region or group) is then computed
- A convenient way to express the resulting value is H*A, i.e.,
- The product of the headcount ratio *H* (the percent of people living in multidimensional poverty), and the average intensity of deprivation *A* (the percent of weighted indicators for which poor households are deprived on average).
- The adjusted headcount ratio *HA* is readily calculated
- HA satisfies some desirable properties. Important example -
- *Dimensional monotonicity*: If a person already identified as poor becomes deprived in *another* indicator she is measured as even *poorer* - not the case using a simple headcount ratio.

Multidimensional poverty tells a different story than income poverty

- The results showed that knowing income poverty is not enough if our concern is with multidimensional poverty.
- Multidimensionally, Bangladesh is substantially less poor - but Pakistan substantially poorer - than would be predicted by income poverty
- Ethiopia is far more multidimensionally poor, and Tanzania much less so, than predicted by income poverty.
- Most Latin American countries e.g. Brazil rank worse on multidimensional poverty than on income poverty; but Colombia's income and MPI poverty ranks are about same.

Table 5.5 Income Poverty Incidence in Selected Countries

Country	Year	Per Capita Monthly Income (2005 PPP)	Headcount Ratio (%)	Poverty Gap (%)	Squared Poverty Gap (%)	Gini Index (%)
Incidence at $1.25 a Day; Poverty Line at 38 (monthly equivalent)						
Bangladesh	2005	48.27	50.47	14.17	5.20	33.22
Benin	2003	52.77	47.33	15.73	6.97	38.62
Brazil	2007	346.64	5.21	1.26	0.44	55.02
Burkina Faso	2003	46.85	56.54	20.27	9.38	39.6
China—Rural	2005	71.34	26.11	6.46	2.26	35.85
China—Urban	2005	161.83	1.71	0.45	0.24	34.8
Côte d'Ivoire	2002	101.11	23.34	6.82	2.87	48.39
Guatemala*	2006	191.7	12.65	3.83	1.63	53.69
Honduras*	2006	184.45	18.19	8.19	5.00	55.31
India—Rural	2004	49.93	43.83	10.66	3.65	30.46
India—Urban	2004	62.43	36.16	10.16	3.80	37.59
Indonesia—Rural	2005	62.79	24.01	5.03	1.61	29.52
Indonesia—Urban	2005	89.1	18.67	4.06	1.29	39.93
Madagascar	2005	44.82	67.83	26.52	13.23	47.24
Mexico	2006	330.37	0.65	0.13	0.05	48.11
Mozambique	2002	36.58	74.69	35.4	20.48	47.11
Nicaragua*	2005	151.18	15.81	5.23	2.54	52.33
Nigeria	2003	39.46	64.41	29.57	17.2	42.93
Pakistan	2004	65.76	22.59	4.35	1.28	31.18
Peru	2006	216.82	7.94	1.86	0.61	49.55
Philippines	2006	98.99	22.62	5.48	1.74	44.04
Rwanda	2000	33.76	76.56	38.21	22.94	46.68
Senegal	2005	66.86	33.5	10.8	4.67	39.19

Table 5.5 Income Poverty Incidence in Selected Countries (continued)

Country	Year	Per Capita Monthly Income (2005 PPP)	Headcount Ratio (%)	Poverty Gap (%)	Squared Poverty Gap (%)	Gini Index (%)
Incidence at $2 a Day; Poverty Line at 60.84 (monthly equivalent)						
Bangladesh	2005	48.27	80.32	34.35	17.55	33.22
Benin	2003	52.77	75.33	33.51	18.25	38.62
Brazil	2007	346.64	12.70	4.15	1.85	55.02
Burkina Faso	2003	46.85	81.22	39.26	22.58	39.60
China—Rural	2005	71.34	55.63	19.47	8.94	35.85
China—Urban	2005	161.83	9.38	2.12	0.81	34.8
Côte d'Ivoire	2002	101.11	46.79	17.62	8.78	48.39
Guatemala*	2006	191.7	25.71	9.63	4.84	53.69
Honduras*	2006	184.45	29.73	14.15	8.91	55.31
India—Rural	2004	49.93	79.53	30.89	14.69	30.46
India—Urban	2004	62.43	65.85	25.99	12.92	37.59
Indonesia—Rural	2005	62.79	61.19	19.55	8.27	29.52
Indonesia—Urban	2005	89.1	45.85	14.85	6.39	39.93
Madagascar	2005	44.82	89.62	46.94	28.5	47.24
Mexico	2006	330.37	4.79	0.96	0.31	48.11
Mozambique	2002	36.58	90.03	53.56	36.00	48.07
Nicaragua*	2005	151.18	31.87	12.26	6.44	52.33
Nigeria	2003	39.46	83.92	46.89	30.8	42.93
Pakistan	2004	65.76	60.32	18.75	7.66	31.18
Peru	2006	216.82	18.51	5.95	2.54	49.55
Philippines	2006	98.99	45.05	16.36	7.58	44.04
Rwanda	2000	33.76	90.3	55.69	38.5	44.11
Senegal	2005	66.86	60.37	24.67	12.98	39.19

Source: data from World Bank, "PovcalNet," http://iresearch.worldbank.org/PovcalNet.

Table 5.6 Multidimensional Poverty Index, Data for 2007–2011

Country and Survey Year	MPI	Percent Poor	Thousands Poor	Poverty Intensity (*A*)
Bangladesh 2007 (D)	0.292	57.8	83,207	50.4
Brazil 2006 (N)	0.011	2.7	5,075	39.3
Burundi 2005 (M)	0.530	84.5	6,128	62.7
Bolivia, PS 2008 (D)	0.089	20.5	1,972	43.7
Burkina Faso 2010 (D)	0.535	84.0	13,834	63.7
Cambodia 2010 (D)	0.212	45.9	6,415	46.1
Colombia 2010 (D)	0.022	5.4	2,500	40.9
Congo, DR 2010 (M)	0.392	74.0	48,815	53.0
Côte d'Ivoire 2005 (D)	0.353	61.5	11,083	57.4
Dominican Republic 2007 (D)	0.018	4.6	439	39.4
Egypt 2008 (D)	0.024	6.0	4,699	40.7
Ethiopia 2011 (D)	0.564	87.3	72,415	64.6
Ghana 2008 (D)	0.144	31.2	7,258	46.2
Guinea 2005 (D)	0.506	82.5	7,459	61.3
Haiti 2005/2006 (D)	0.299	56.4	5,346	53.0
Honduras 2005/2006 (D)	0.159	32.5	2,281	48.9
India 2005/2006 (D)	0.283	53.7	612,203	52.7
Indonesia 2007 (D)	0.095	20.8	48,352	45.9
Kenya 2008/2009 (D)	0.229	47.8	18,863	48.0
Lao PRD 2006 (M)	0.267	47.2	2,757	56.5
Liberia 2007 (D)	0.485	83.9	3,218	57.7
Mali 2006 (D)	0.558	86.6	11,771	64.4
Mexico 2006 (N)	0.015	4.0	4,313	38.9
Madagascar 2008/2009 (D)	0.357	66.9	13,463	53.3
Malawi 2010 (D)	0.334	66.7	9,633	50.1
Mozambique 2009 (D)	0.512	79.3	18,127	64.6
Nepal 2011 (D)	0.217	44.2	13,242	49.0
Niger 2006 (D)	0.642	92.4	12,437	69.4
Nigeria 2008 (D)	0.310	54.1	83,578	57.3
Pakistan 2006/2007 (D)	0.264 d	49.4 d	81,236 d	53.4 d
Peru 2008 (D)	0.066	15.7	4,422	42.2
Philippines 2008 (D)	0.064	13.4	12,083	47.4
Rwanda 2010 (D)	0.350	69.0	6,900	50.8
Senegal 2010/2011 (D)	0.439	74.4	7,642	58.9
Sierra Leone 2008 (D)	0.439	77.0	4,321	57.0
South Africa 2008 (N)	0.057	13.4	6,609	42.3
Tanzania, 2010 (D)	0.332	65.6	28,552	50.7
Timor-Leste 2009/2010 (D)	0.360	68.1	749	52.9
Uganda 2011 (D)	0.367	69.9	24,122	52.5
Vietnam 2010/2011 (M)	0.017	4.2	3,690	39.5
Yemen 2006 (M)	0.283	52.5	11,176	53.9

Key: D indicates data are from Demographic and Health Surveys, M indicates data are from Multiple Indicator Cluster Surveys, d indicates lower bound estimate, and N indicates data are from national surveys. Not all indicators were available for all countries; caution should thus be used in cross-country comparisons. Where data are missing, indicator weights are adjusted to total 100%.

Source: UNDP, *Human Development Report, 2013*, pp. 160–161.

5.5 Economic Characteristics of High-Poverty Groups

- Rural poverty
- Women and poverty
- Ethnic minorities, indigenous populations, and poverty

Table 5.7 Poverty: Rural versus Urban

Region and Country	Survey Year	Percentage below National Poverty Line		
		Rural Population	Urban Population	National Population
Sub-Saharan Africa				
Benin	2003	46.0	29.0	39.0
Burkina Faso	2003	52.4	19.2	46.4
Cameroon	2007	55.0	12.2	29.9
Malawi	2005	55.9	25.4	52.4
Tanzania	2001	38.7	29.5	35.7
Uganda	2006	34.2	13.7	31.1
Zambia	2004	72.0	53.0	68.0
Asia				
Bangladesh	2005	43.8	28.4	40.0
India	2000	30.2	24.7	28.6
Indonesia	2004	20.1	12.1	16.7
Uzbekistan	2003	29.8	22.6	27.2
Vietnam	2002	35.6	6.6	28.9
Latin America				
Bolivia	2007	63.9	23.7	37.7
Brazil	2003	41.0	17.5	21.5
Dominican Republic	2007	54.1	45.4	48.5
Guatemala	2006	72.0	28.0	51.0
Honduras	2004	70.4	29.5	50.7
Mexico	2004	56.9	41.0	47.0
Peru	2004	72.5	40.3	51.6

Source: data from World Bank, *World Development Indicators, 2010* (Washington, D.C.: World Bank, 2010), tab. 2.7.

Table 5.8 Indigenous Poverty in Latin America

Population below the Poverty Line (%), Early 1990s			Change in Poverty (%), Various Periods		
Country	Indigenous	Nonindigenous	Period	Indigenous	Nonindigenous
Bolivia	64.3	48.1	1997–2002	0	–8
Guatemala	86.6	53.9	1989–2000	–15	–25
Mexico	80.6	17.9	1992–2002	0	–5
Peru	79.0	49.7	1994–2000	0	+3

Sources: Data for the left side of the table from George Psacharopoulos and Harry A. Patrinos, "Indigenous people and poverty in Latin America," *Finance and Development* 31 (1994): 41, used with permission; data for the right side of the table from Gillette Hall and Harry A. Patrinos, eds., *Indigenous Peoples, Poverty, and Human Development in Latin America, 1994–2004* (New York: Palgrave Macmillan, 2006).

Workfare

- Workfare, such as a Food for Work Program, represents a better policy than welfare when these criteria are met:
  - The program does not reduce incentives for the poor to acquire human capital and other assets
  - There are greater net benefits of the program's work output
  - It is harder to screen the poor without a workfare requirement
- Poor workers have lower opportunity cost of time (so the economy loses little output when they work in the program)

Workfare

- Non-poor workers have higher opportunity cost of time (so they are unlikely to participate to get the benefits)
- The fraction of the population living in poverty is smaller (so the extra costs of a universal welfare scheme would be high)
- There is less social stigma of visible workfare participation, so the poor do not suffer humiliation or be deterred from needed work (otherwise, a discreet welfare transfer may be preferable)

5.6 Policy Options on Income Inequality and Poverty: Some Basic Considerations

- Areas of Intervention:
  - Altering the functional distribution
  - Mitigating the size distribution
  - Moderating (reducing) the size distribution at upper levels
  - Moderating (increasing) the size distribution at lower levels

5.6 Policy Options on Income Inequality and Poverty: Some Basic Considerations

- Policy options
  - Changing relative factor prices
  - Progressive redistribution of asset ownership
  - Progressive taxation
  - Transfer payments and public provision of goods and services

5.7 Summary and Conclusions: The Need for a Package of Policies

- Policies to correct factor price distortions
- Policies to change the distribution of assets, power, and access to education and associated employment opportunities
- Policies of progressive taxation and directed transfer payments
- Policies designed to build capabilities and human and social capital of the poor
- Some specific programs covered in later chapters include: conditional cash transfers (Chapter 8); agricultural extension (Chapter 9); and micro-finance (Chapter 15, and Chapter 11 cases)

Concepts for Review

- Absolute poverty
- Asset ownership
- Character of economic growth
- Decile
- Disposable income
- Factor share distribution of income
- Factors of production
- Foster-Greer-Thorbecke (FGT) index
- Functional distribution of income
- Gini coefficient
- Headcount index
- Income inequality
- Indirect taxes
- Kuznets curve
- Land reform

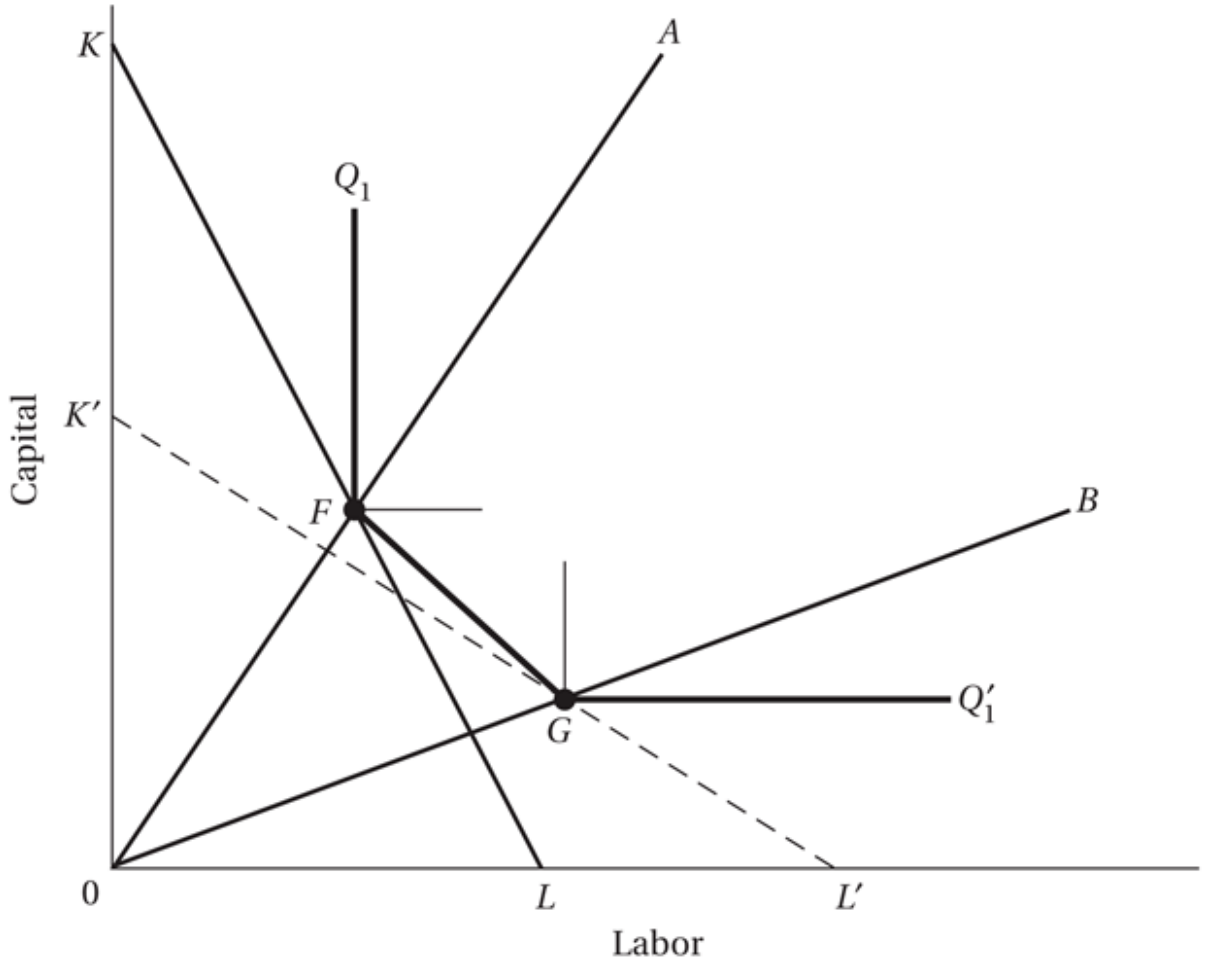
Concepts for Review (cont'd)

- Lorenz curve
- Multidimensional poverty index (MPI)
- Personal distribution of income
- Progressive income tax
- Public consumption
- Quintiles
- Redistribution policies
- Regressive tax
- Size distribution of income
- Subsidy
- Total poverty gap (TPG)
- Workfare programs

Appendix 5.1: Appropriate Technology and Employment Generation: The Price Incentive Model

- Choice of techniques
- Factor Price distortions and appropriate technology
- Possibilities of Labor-Capital substitution

Figure A5.1.1 Choice of Techniques: The Price Incentive Model



Appendix 5.2: The Ahluwalia-Chenery Welfare Index

- Constructing poverty-weighted index of social welfare

Table A5.2.1 Income Distribution and Growth in 12 Selected Countries

	Income Growth			Annual Increase in Welfare		
Country	Upper 20%	Middle 40%	Lowest 40%	GNI Weights	Equal Weights	Poverty Weights
Brazil	6.7	3.1	3.7	5.2	4.1	3.5
Colombia	5.2	7.9	7.8	6.2	7.3	7.8
Costa Rica	4.5	9.3	7.0	6.3	7.4	7.8
El Salvador	3.5	9.5	6.4	5.7	7.1	7.4
India	5.3	3.5	2.0	4.2	3.3	2.5
Mexico	8.8	5.8	6.0	7.8	6.5	5.9
Panama	8.8	9.2	3.2	8.2	6.7	5.2
Peru	3.9	6.7	2.4	4.6	4.4	3.8
Philippines	5.0	6.7	4.4	5.5	5.4	5.2
South Korea	12.4	9.5	11.0	11.0	10.7	10.5
Sri Lanka	3.1	6.3	8.3	5.0	6.5	7.6
Taiwan	4.5	9.1	12.1	6.8	9.4	11.1

Sources: International Bank for Reconstruction and Development/The World Bank: *Redistribution with Growth: An Approach to Policy*. Copyright © 1974 by The World Bank. Reprinted with permission.