

Chapter 6

TABLE 6.1 Typical Size Distribution of Personal Income in a Developing Country by Income Shares—Quintiles and Deciles

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

Note: Measure of inequality = ratio of bottom 40% to top 20% = 14/51 = 0.28.

Figure 6.1 The Lorenz Curve

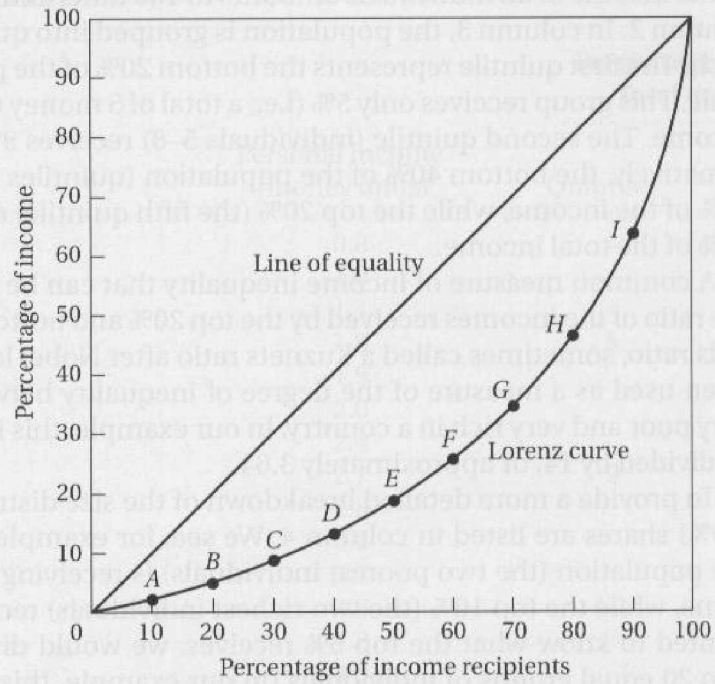


Figure 6.2 The Greater the Curvature of the Lorenz Line, the Greater the Relative Degree of Inequality

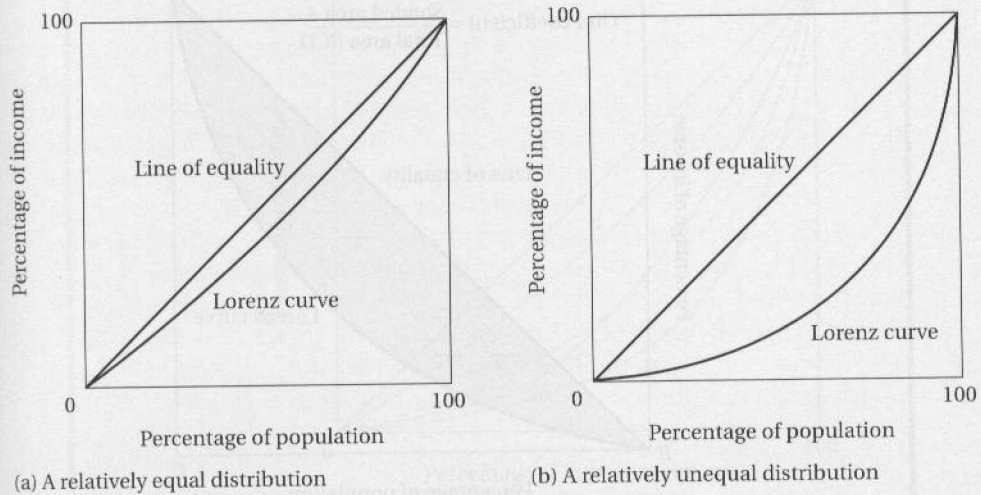


Figure 6.3 Estimating the Gini Coefficient

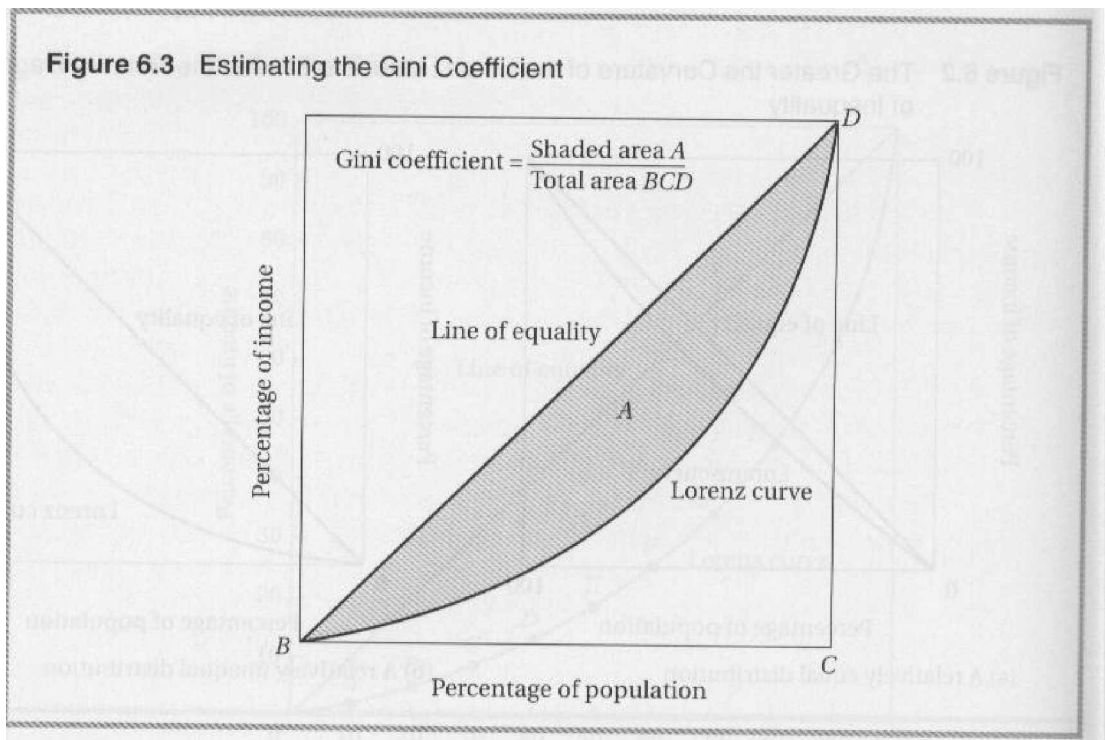


Figure 6.4 Four Possible Lorenz Curves

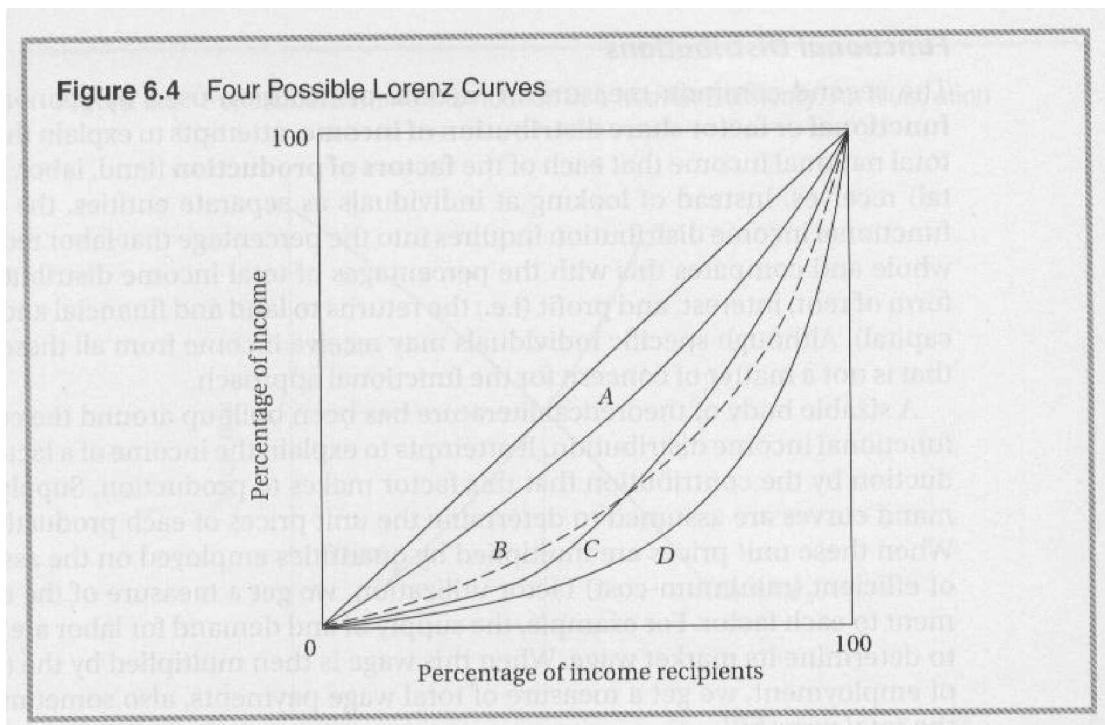


Figure 6.5 Functional Income Distribution in a Market Economy: An Illustration

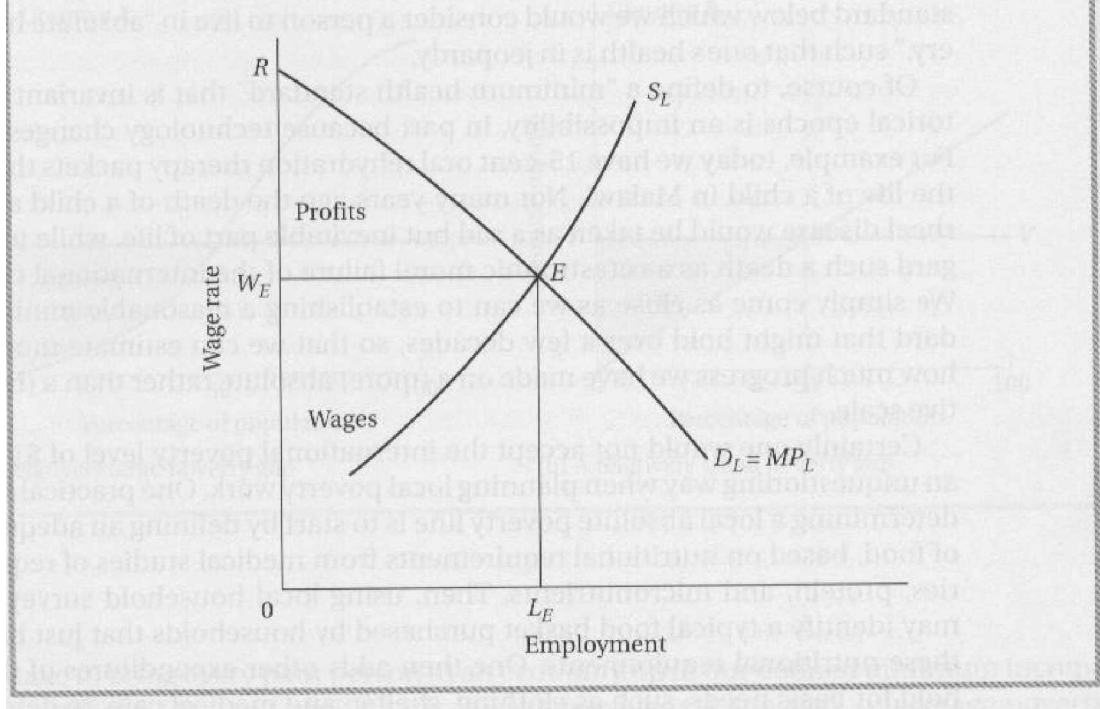


Figure 6.6 Measuring the Poverty Gap

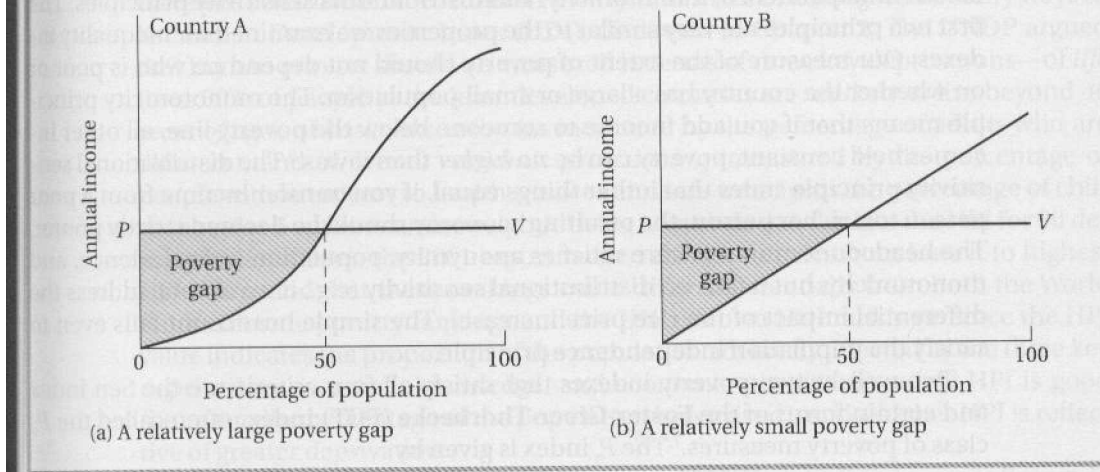


Figure 6.7 Improved Income Distribution under the Traditional-Sector Enrichment Growth Typology

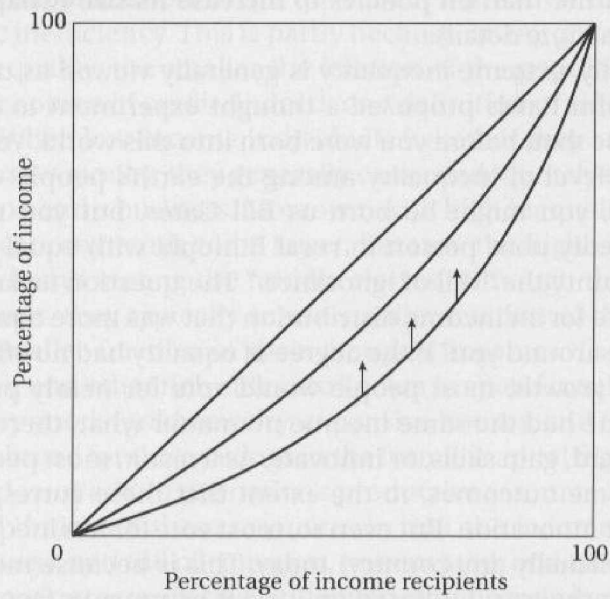


Figure 6.8 Worsened Income Distribution under the Modern-Sector Enrichment Growth Typology

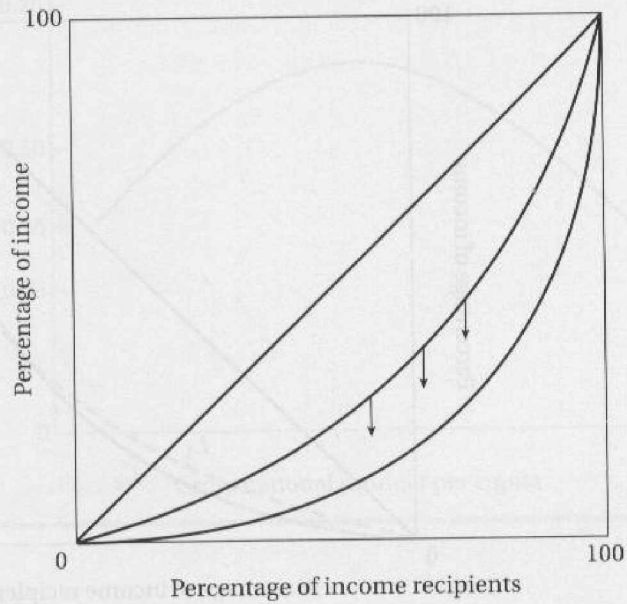


Figure 6.9 Crossing Lorenz Curves in the Modern-Sector Enlargement Growth Typology

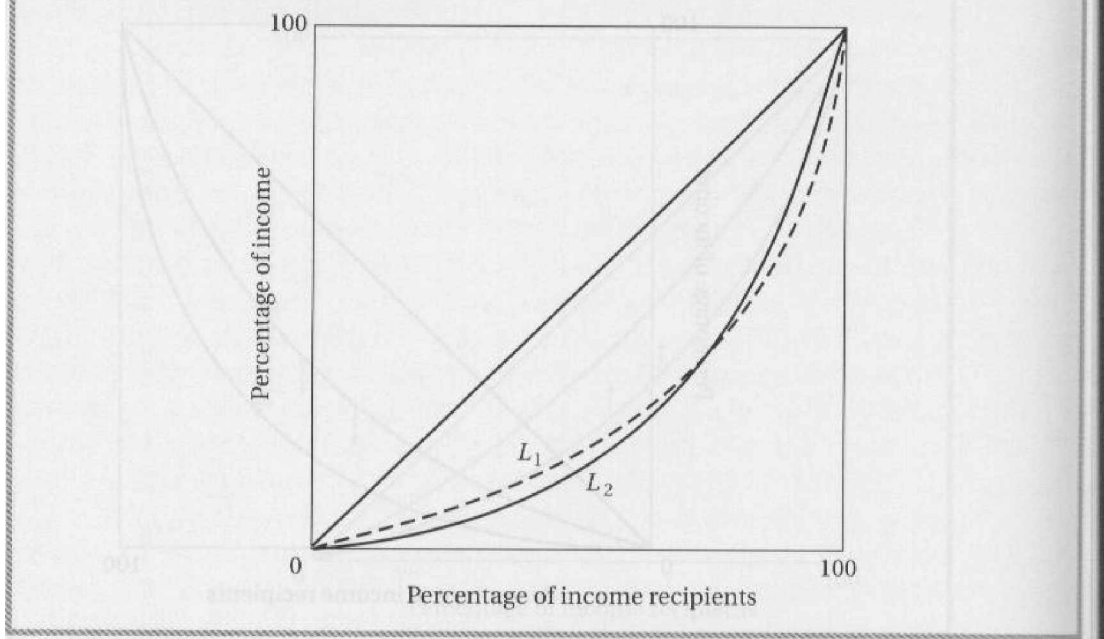


Figure 6.10 The "Inverted-U" Kuznets Curve

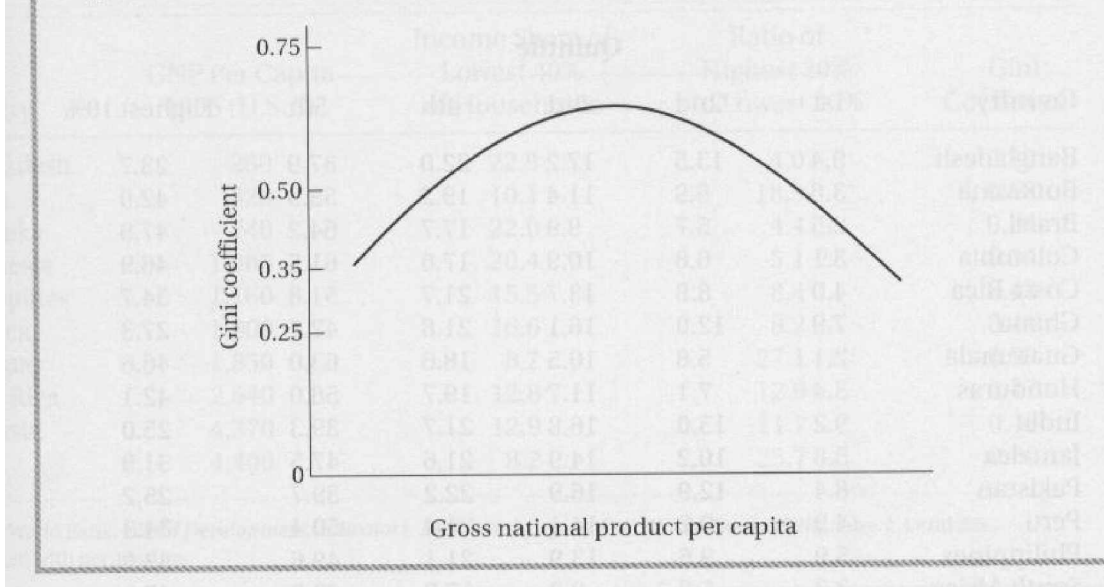


TABLE 6.2 Some Income Distribution Estimates, 1990s

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	

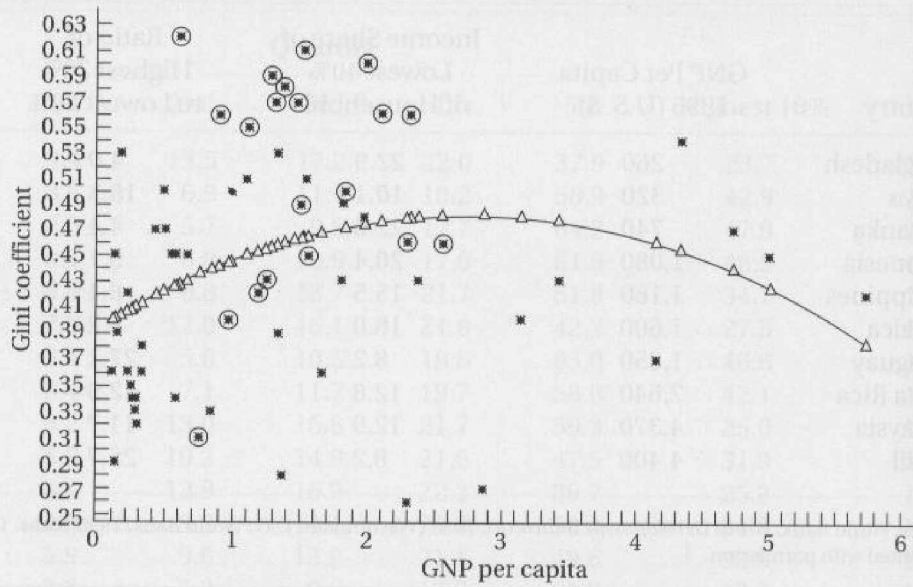
Source: World Bank, *1998 World Development Indicators* (Washington, D.C., World Bank, 1998), tab. 2.8. Reprinted with permission

TABLE 6.3 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. Reprinted with permission.

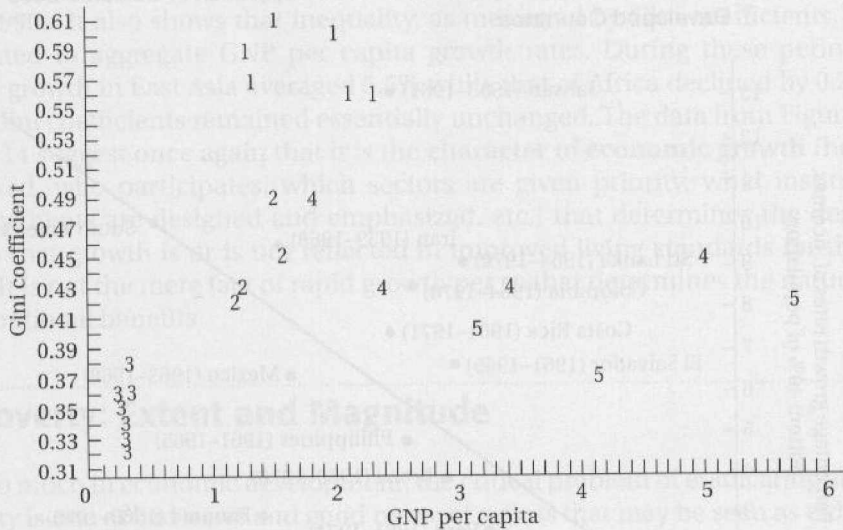
Figure 6.11 Kuznets Curve with Latin American Countries Identified



Star – Actual Data
 Triangle – Predicted relationship
 Circled – Latin American

Source: Gary Fields, *Distribution and Development: A New Look at the Developing World* (Cambridge, Mass.: MIT Press, 2001), chap. 3. Reprinted with permission.

Figure 6.12 Plot of Inequality data for selected countries



1 = Brazil
 2 = Costa Rica
 3 = Pakistan
 4 = Hong Kong
 5 = Singapore

Source: Gary Fields, *Distribution and Development: A New Look at the Developing World* (Cambridge, Mass.: MIT Press, 2001), chap. 3. Reprinted with permission.

Figure 6.13 Comparison of Gross National Product Growth Rates and Income Growth Rates of the Bottom 40 Percent of the Population in Selected Less Developed Countries

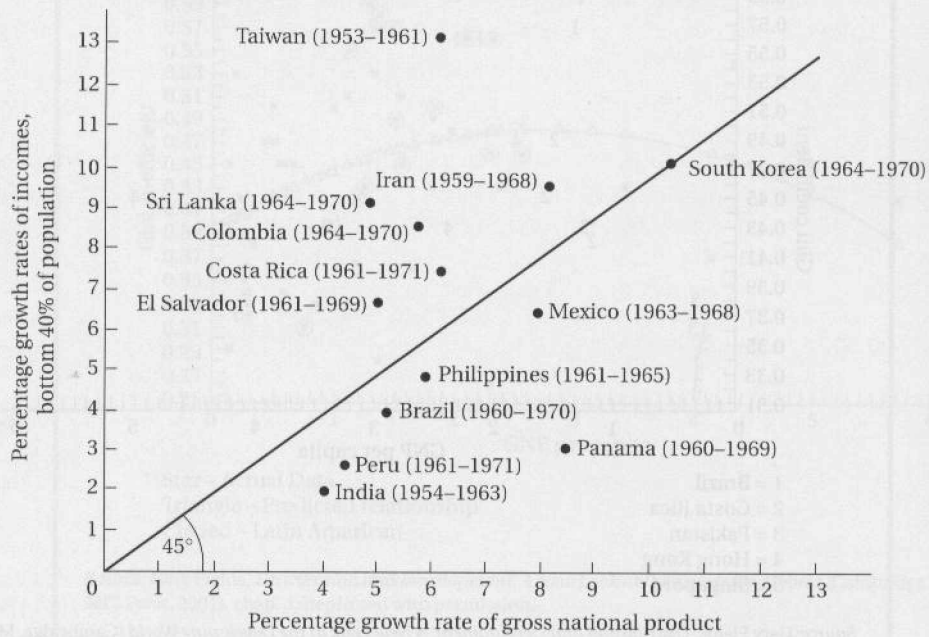
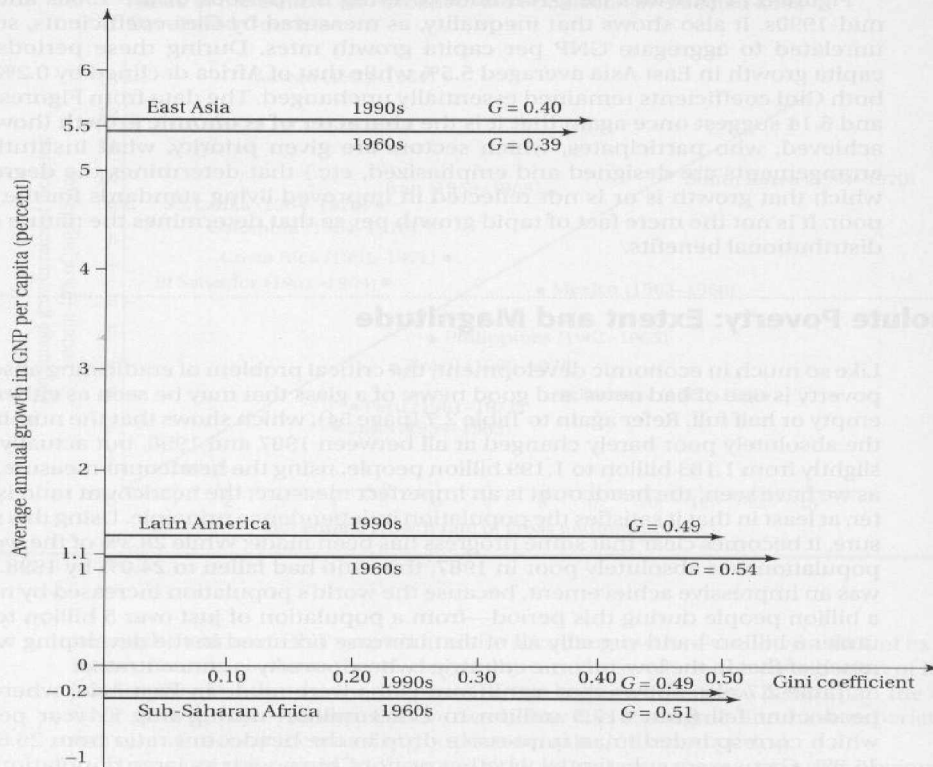
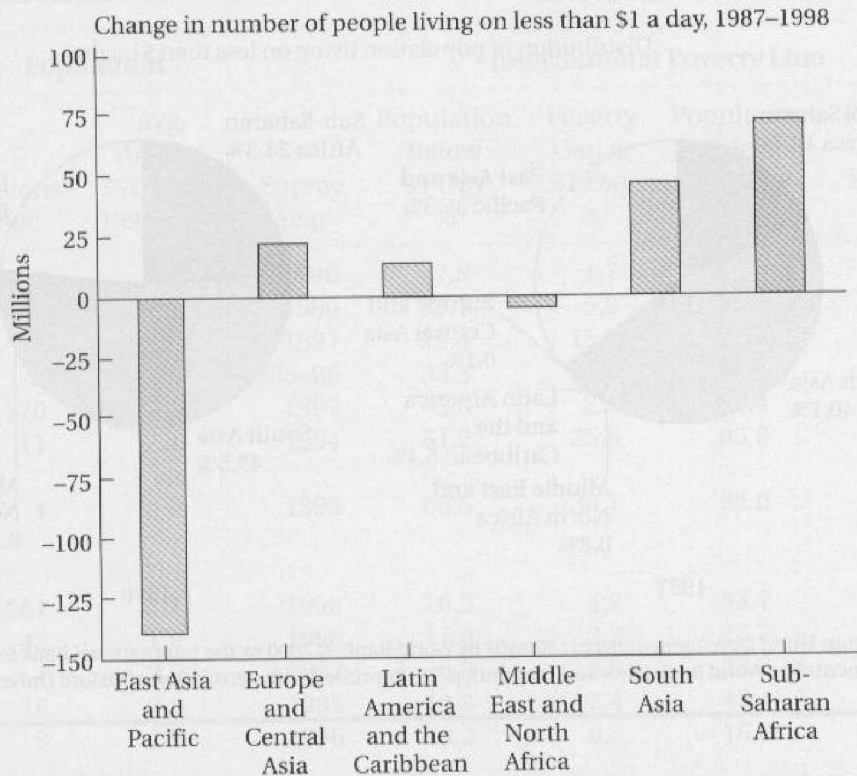


Figure 6.14 Long-Term Economic Growth and Income Inequality, 1965–1996



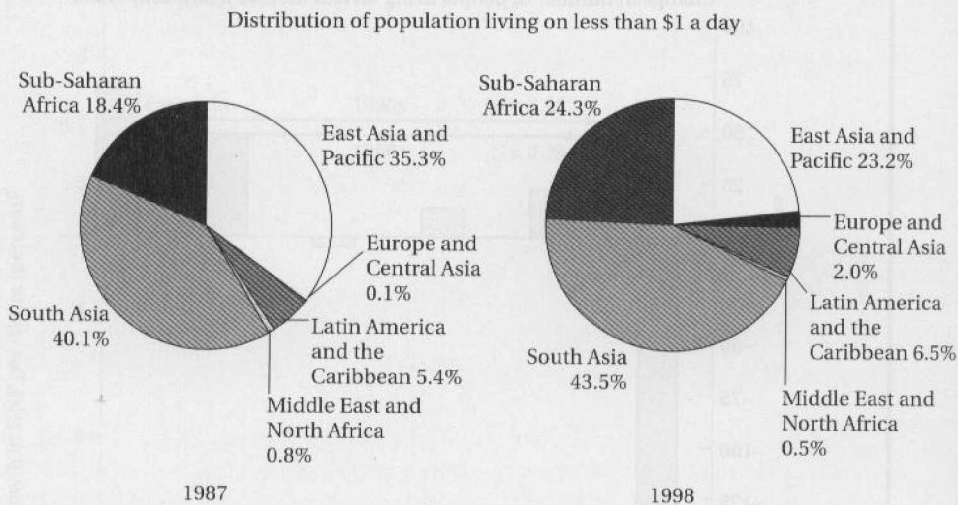
Sources: World Bank, 1998 *World Development Indicators* (Washington, D.C.: World Bank, 1998), tab. 1.4; *Economist*, October 19, 1996, p. 82.

Figure 6.15 Where Poverty Has Fallen, and Where It Has Not



Source: From *World Development Report 2000/01* by World Bank, © 2000 by the International Bank for Reconstruction and Development/The World Bank (New York: Oxford), p. 24. Reprinted with permission of Oxford University Press, Inc.

Figure 6.16 Poverty in the Developing World Is Shifting toward South Asia and Sub-Saharan Africa



Source: From *World Development Report 2000/01* by World Bank, © 2000 by the International Bank for Reconstruction and Development/The World Bank (New York: Oxford), p. 24. Reprinted with permission of Oxford University Press, Inc.

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	14.0

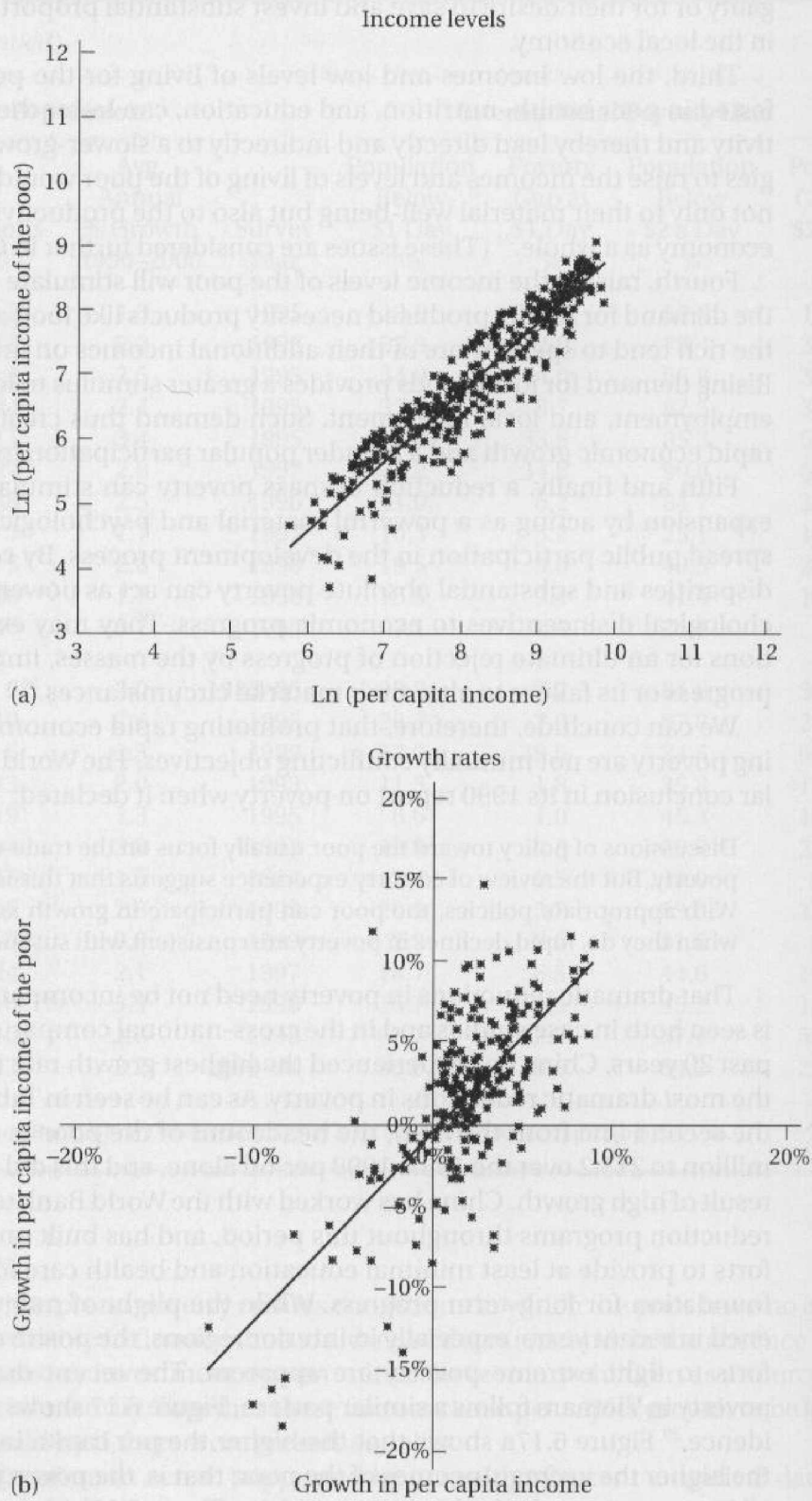
(continued)

TABLE 6.4 (continued)

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 %
Mongolia	2	1.3	1995	13.9	3.1	50.0	17.5
Mozambique	18	2.2	1996	37.9	12.0	78.4	36.8
Namibia	2	2.5	1993	34.9	14.0	55.8	30.4
Nepal	24	2.4	1995	37.7	9.7	82.5	37.5
Niger	11	3.4	1995	61.4	33.9	85.3	54.8
Nigeria	127	2.8	1997	70.2	34.9	90.8	59.0
Pakistan	138	2.5	1996	31.0	6.2	84.7	35.0
Panama	3	1.7	1997	10.3	3.2	25.1	10.2
Paraguay	5	2.6	1998	19.5	9.8	49.3	26.3
Peru	26	1.7	1996	15.5	5.4	41.4	17.1
Russian Federation	146	-0.2	1998	7.1	1.4	25.1	8.7
Rwanda	9	2.0	1983–85	35.7	7.7	84.6	36.7
Senegal	10	2.6	1995	26.3	7.0	67.8	28.2
Sierra Leone	5	2.3	1989	57.0	39.5	74.5	51.8
South Africa	43	2.0	1993	11.5	1.8	35.8	13.4
Sri Lanka	19	1.3	1995	6.6	1.0	45.4	13.5
Tanzania	34	2.8	1993	19.9	4.8	59.7	23.0
Turkey	65	1.5	1994	2.4	0.5	18.0	5.0
Turkmenistan	5	2.8	1993	20.9	5.7	59.0	23.3
Ukraine	50	-0.5	1999	2.9	0.6	31.0	8.0
Venezuela, RB	24	2.1	1997	18.7	6.5	44.6	19.0
Yemen, Rep.	18	3.9	1998	15.7	4.5	45.2	15.0
Zambia	10	2.6	1998	63.7	32.7	87.4	55.4
Zimbabwe	12	2.2	1990–91	36.0	9.6	64.2	29.4

Source: Adapted from World Bank, *World Development Report 2002* (New York: Oxford), tab. 2, pp. 234–235.

Figure 6.17 Growth and the Poor



Source: David Dollar and Aart Kraay, "Growth is Good for the Poor," World Bank Working Paper, presented at George Washington University, Economics Department, October 9, 2001; graphs used with permission of the authors.

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

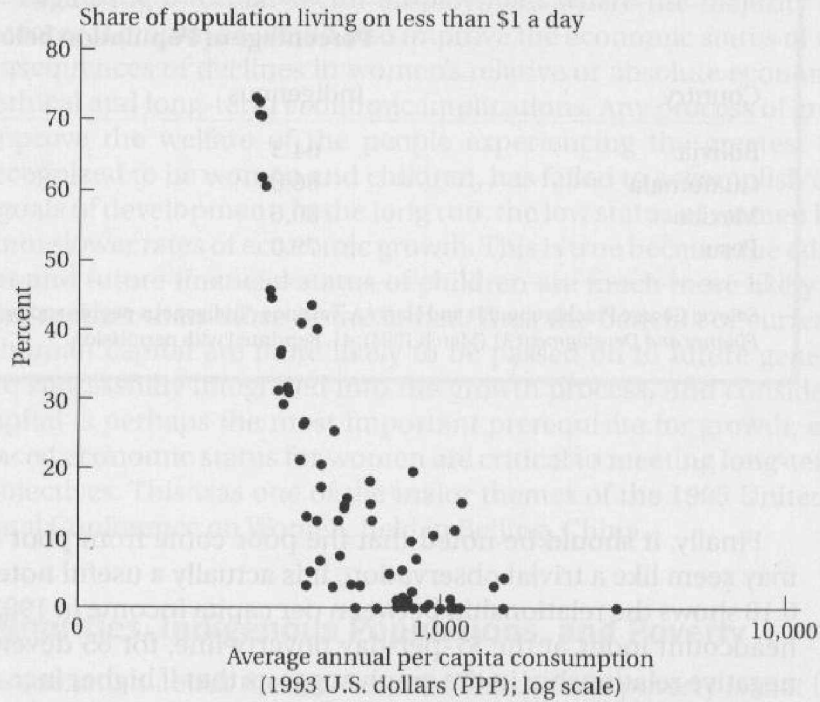
Source: World Bank, *World Development Report, 1990: Poverty* (New York: Oxford University Press, 1990), tab. 2.2. Reprinted with permission.

TABLE 6.6 Indigenous Poverty in Latin America

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

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

Figure 6.18 Poverty Declines as National Income Rises



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

Figure A6.1.1 Choice of Techniques: The Price-Incentive Model

