INCOME INEQUALITY AND DEVELOPMENT

A. Introduction

In recent years there has been increasing concern about trends in income distribution. This concern is rooted in fears that globalization and greater play of market forces are somehow accentuating inequalities at the national level. But against these fears, it has been suggested that integration into the world economy can actually resolve the apparent trade-off between growth and equity. In this respect the East Asian experience is often cited; in those countries rapid and sustained growth has supposedly been combined with low and declining inequality thanks to market-friendly, outward-oriented policies.[1]

This chapter presents evidence on patterns and trends in income inequality and discusses why growth is sometimes associated with rising and sometimes with falling inequality. The next chapter focuses on the relationship between trade and financial liberalization and specific components of inequality - wage differentials, wage and profit shares in value added, agricultural incomes and interest incomes.

The thrust of these chapters is analytical rather than normative; questions of justice and equity are not broached.[2] Equally, the analysis is not concerned with poverty *per se*. Maintaining minimum socially adequate levels of consumption of the poor is certainly a serious social challenge for governments. However, it is the spending behaviour of the rich and the deployment of income from their capital assets which is of central importance for the rate of investment and growth. Moreover, preventing the development of a polarized society through the hollowing-out of the income share of the middle class and a rising gap between the richest and poorest groups in society is important for political stability. All three problems present policy dilemmas and deserve attention.

B. Personal income distribution: recent evidence

A major difficulty facing all research on income distribution, particularly in developing countries, is the availability of reliable and comparable data.[3] This section draws on a recently compiled data set which has gathered more than 2,600 income distribution observations from various primary and secondary sources, and filtered them to give "high quality data", which include 682 observations from 108 countries.[4] This material, supplemented where necessary by data from other sources, provides information on Gini coefficients and income shares of population quintiles (see box 6) for a large number of countries and also enables some analysis to be made of long-term

Box 6

INCOME DISTRIBUTION AND THE MEASUREMENT OF INEQUALITY

Analyses of income distribution within a country are founded on two general approaches. The first focuses on the functional distribution of income, i.e. the share of national income accruing to different factors of production. Classically, the basic division of national income is between wages (paid to labour), profits (the reward to capital) and rent (income from land). But it is possible to differentiate further by sector, location, and mode of production, distinguishing, for example, workers and capitalists in rural and urban areas, the self-employed and other workers in urban areas, and subsistence and commercial farmers. The second approach focuses on the personal (or size) distribution of income, i.e. a description of how much income is received during a given period by individual recipient units within a given population. The recipient units are generally households or individuals. In the latter case, estimates of household incomes are adjusted by household size (sometimes using an adult-equivalent scale) to give household income per capita (or per equivalent individual). [1]

Whilst analysis of factor incomes is based on national accounting data, the basic data for analyses of personal income distribution are obtained from household surveys. Three main sources of income are usually considered to calculate gross incomes available to households: (1) wages and salaries of employees and income from self-employment; (2) "property income", which includes interest, rents and dividends, but excludes retained corporate profits; and (3) current transfers, comprising social security benefits, pensions and life insurance annuity benefits, and other current transfers. Capital gains are usually excluded from consideration, but attempts are made to include income in kind, which ideally should cover fringe benefits from employment (which can be important in rich countries), production for own consumption (particularly important in agrarian societies), and the imputed rent received by homeowners. Net household income (or disposable household income) is calculated by deducting direct taxes and social security and pension fund contributions from the gross figure.[2]

Personal income distribution statistics provide a measure of the living standards of individuals and households. They are regarded as a measure of personal welfare, on the assumption that welfare is derived from personal consumption and that income during a period represents potential consumption and thus potential welfare. The measure is nevertheless only a partial one, since it is concerned uniquely with "that part of total welfare which is attributable to the consumption of goods and services of the kinds which are normally sold on the market".[3] It excludes welfare derived from services provided free by government - notably for health and education. Moreover, there is an implicit assumption that income is shared out equally within households, and hence that no biases arise because of the intra-household distribution of resources. Sometimes personal income distribution statistics use household consumption expenditure rather than household income as an indicator of living standards and welfare. Expenditure data are regarded as more accurate than income data, because there are likely to be fewer errors of under-reporting. But because of higher savings rates of upper-income groups, such statistics give lower estimates of "income inequality" than those based on income data.

The main approach to measuring income inequality focuses on the relative shares of the total income of the population received by different persons or households. One common way in which these shares are depicted graphically is using a Lorenz curve, which shows the cumulative share of the income received by cumulative shares of the population, starting from the poorest income-receiving units. From this curve simple indicators of income distribution, such as the share of the richest 20 per cent (fifth quintile) or the share of the poorest 40 per cent (first and second quintiles) in the total income of the population, can be derived. An example of a Lorenz curve is the chart, which compares income distribution in Brazil and Finland: the chart shows that in Brazil in 1989 the richest quintile received 65 per cent of the total income and the poorest 40 per cent received 7 per cent, while in Finland in 1991 the corresponding proportions were 34 per cent and 26 per cent.

The Gini coefficient is the most common statistical indicator of inequality. It is the area between the Lorenz curve and the diagonal of perfect equality and varies from 0 (maximum equality) to 1 (maximum inequality), or from 0 to 100 when expressed in per cent. The more unequal the income distribution, the greater the distance of the Lorenz curve from the diagonal, and the greater the Gini coefficient. But this index is not particularly sensitive to inequality due to extreme affluence.[4]

A second general approach to measuring inequality is to examine the absolute income levels of particular population groups (such as the poorest 40 per cent of the population and the richest 20 per cent).[5] The per capita absolute income of a particular group can be calculated by multiplying GNP per capita by the income share of that group and by dividing their population share. This procedure gives

Lorenz Curve: Income Distribution in Finland (1991) and Brazil (1989)
Percentage
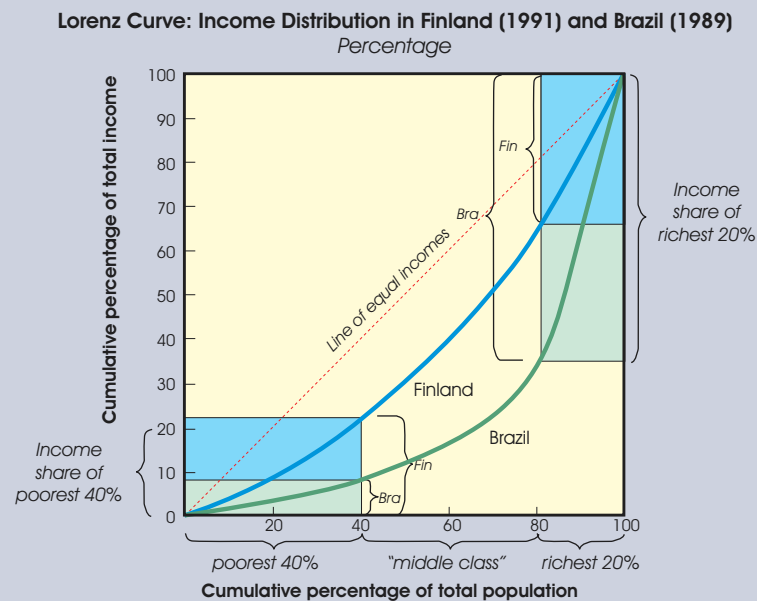
only a rough approximation of the absolute incomes of different groups, since the sum of personal incomes as measured by household surveys is less than GNP. But it provides a useful complement to statistics based on relative shares. For example, falling shares of certain population groups, including of course the poorest, are not necessarily associated with declining absolute incomes when an economy is growing. Also, absolute income statistics can indicate whether or not there is an increasing absolute income gap between the rich and the poor.

The axiomatic basis for income inequality statistics is that the measure should satisfy the criterion that when an income transfer is made from a richer to a poorer income-recipient unit there is a decrease in the index of inequality (and vice versa). This condition is not necessarily satisfied when polarization occurs, and thus increasingly a distinction has been made between inequality and polarization. An income distribution can be said to be more polarized when the distribution is more "spread out" from the middle, so that there are fewer persons or households with middle-level incomes. Alternatively, polarization may refer to a situation in which there is increasing bimodality in the income distribution in the sense that the frequency of middle-level incomes declines and the frequency of either higher- or lower-level incomes increases. New statistics are being derived to measure this phenomenon,[6] but polarization can at a simple and intuitive level be detected if the gap between the rich and the poor is increasing.

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[1] Throughout this Part of the *Report*, the term "personal income distribution" is used interchangeably to refer to the distribution of income among households or among persons. Some analysts, however, reserve this term for the latter type of distribution and refer to the former as "household income distribution".

[2] Guidelines for collecting and preparing income distribution statistics are summarized in United Nations, *Provisional Guidelines on Statistics of the Distribution of Income, Consumption and Accumulation of Households*, Statistical Papers, Series M, No. 61, New York, 1977.

[3] H. Lydall, "Effects of Alternative Measurement Techniques on the Estimation of the Inequality of Income", *World Employment Research Working Paper*, No. 2-23/100 (Geneva: ILO, 1981), p. 11.

[4] For a discussion of the sensitivity of various measures of inequality, including the Gini coefficient, to extreme poverty, extreme affluence, and other forms of inequality, see D. Champernowne, "A Comparison of Measures of Income Distribution", *Economic Journal*, Vol. 84, 1974.

[5] This was a central method adopted by the World Bank in the 1970s (see H. Chenery *et al.*, *Redistribution with Growth* (New York and Oxford: Oxford University Press, 1974)).

[6] It has been shown that it is possible for redistributive transfers from richer to poorer households to coincide with increased polarization. Also, in the transition to a bimodal distribution, it is possible for the income share of the, say, middle 30 per cent of the population to decrease while the share of the middle 60 per cent increases, and on this basis it has been concluded that analyses which seek to measure polarization using quintile shares "are unable to detect the phenomenon they claim to be studying". Various measures of polarization have been suggested to deal with such problems; see M.C. Wolfson, "When Inequalities Diverge", *The American Economic Review,* Vol. 84, No. 2 *(Papers and Proceedings)*, May 1994.

trends in some developing countries in Latin America and East Asia. All the data are derived from household surveys, which are based on representative samples covering the whole country, and they attempt comprehensive measurement of incomes (going beyond wage income and including estimates of income-in-kind) or of consumption expenditure.[5]

1. North-South differences in income inequality

There is substantial variation among countries in terms of their pattern of income inequality. One way of depicting these differences is to focus on the share of total income received by the poorest 40 per cent, the middle 40 per cent (the "middle class"), and the richest 20 per cent of the population.[6] As these shares vary systematically a broad classification of countries can be made according to their pattern of inequality (see chart 8). At one end of the scale, it is possible to identify a number of highly unequal societies, in which the richest 20 per cent of the population receives around 60 per cent of total income, the middle class 30 per cent, and the poorest 40 per cent a mere 10 per cent of the total. In such "60:30:10" societies, the average income of the poorest 40 per cent of the population is only a quarter of the national average, and the average income of the richest 20 per cent is four times greater than that of the middle class, and 12 times greater than that of the bottom 40 per cent. At the other end of the scale, there are a few "low inequality" societies in which the share of total income of the middle class exceeds that of the richest 20 per cent. In between, a repeated pattern is for the richest 20 per cent of the population to receive around 40 per cent of total income, the middle class the same share, and the poorest 40 per cent only about 20 per cent. In these "40:40:20" societies, the average income of the middle class is equal to the national average, and the average income of the richest 20 per cent is just double that of the middle class, and four times greater than that of the poorest 40 per cent.

In most developed countries there is a "40:40:20" pattern - or the income share of the middle class is greater than that of the richest quintile. The only exceptions are Australia, Ireland, New Zealand and the United States, in which the share of the richest quintile has recently been 44-46 per cent of total income.

A few developing countries have 40:40:20 societies, but most are high-inequality countries or in an intermediate category, where the richest 20 per cent of the population receive sometimes more, and sometimes less, than 50 per cent of the total income. The developing countries which have a 60:30:10 distribution are mainly in Latin America and Africa (chart 8). Only three developing economies can be classified as having 40:40:20 societies on the basis of income, rather than consumption expenditure, shares: the Republic of Korea, Taiwan Province of China, and Nepal.[7] East Asia includes economies with both lower and higher levels of inequality. Thailand stands out as a highly unequal society, whilst Malaysia is one of the nine countries in the intermediate category in which the richest quintile receives more than 50 per cent of total household income. Some data on income, rather than consumption expenditure, for Indonesia also suggest that that country too, like Hong Kong and Singapore, is in the intermediate category.[8]

Overall, this pattern confirms the continuing existence of a major difference between developing and developed countries which was identified over 40 years ago by Kuznets:

> The former [developing countries] have no "middle" classes: there is a sharp contrast between the preponderant portion of the population whose average income is well below the generally low country-wide average, and a small top group with a very large relative income excess. The developed countries, on the other hand, are characterized by a much more gradual rise from low to high shares, with substantial groups receiving more than the high countrywide income average, and the top groups securing smaller shares than the comparable ordinal groups in underdeveloped countries.[9]

A more precise view of the North-South divide in terms of distribution of the national income can be gained if the relationship between income inequality and GNP per capita is examined. Using a GNP per capita of $3,000 (in 1987 prices) to mark off developing countries from the developed market economies for the 74 countries for which data are available (a threshold which separates low-income, lower-middle income and most upper-income developing countries from richer countries), it is apparent that:

(i) Income inequality is greater in the developing countries, except for the very poorest, than in the richer countries;

Chart 8

RECENT PATTERNS IN PERSONAL INCOME DISTRIBUTION IN 92 COUNTRIES
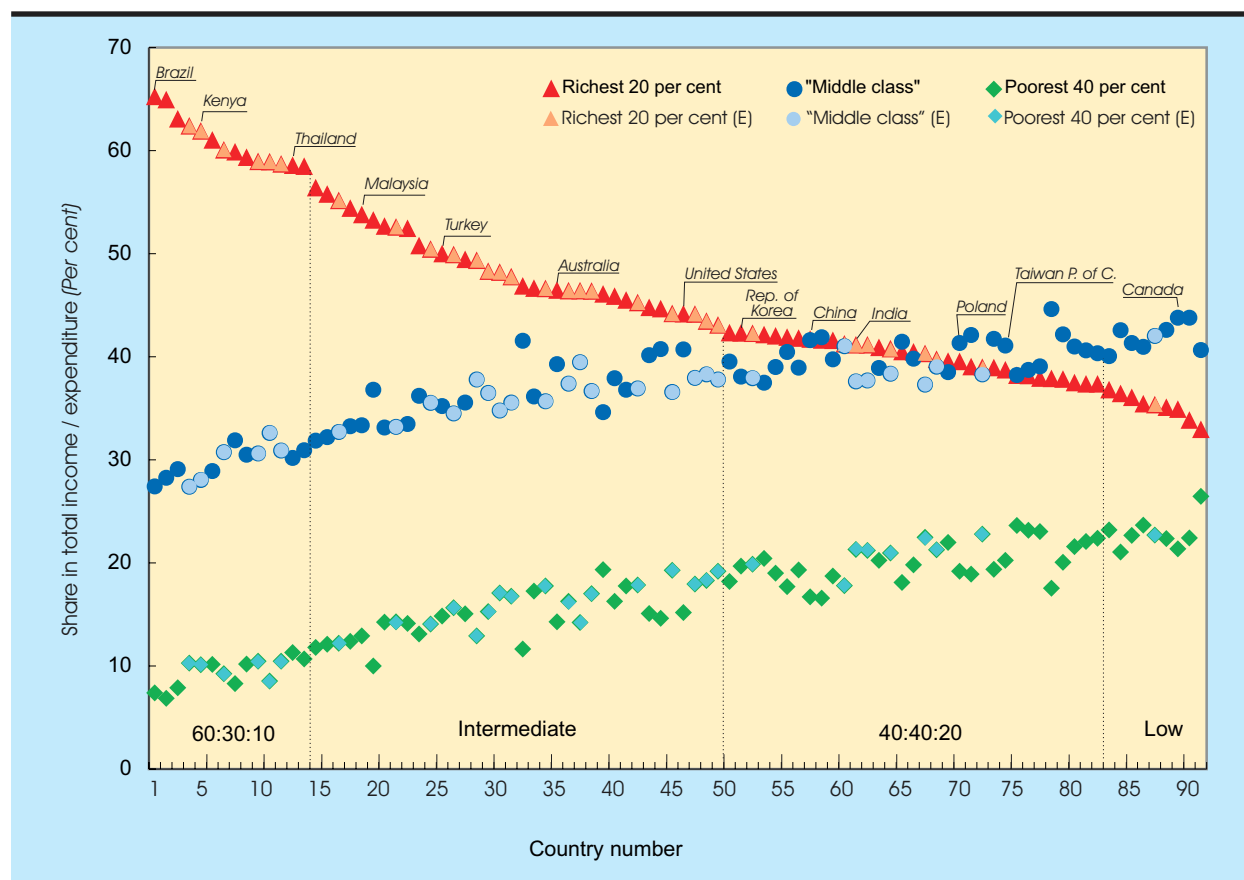
60:30:10 societies	Intermediate societies			40:40:20 societies		Low inequality societies
	Share of richest 20 per cent					
	> 50 per cent	< 50 per cent				
(1) Brazil	(15) Honduras	(28) Hong Kong	(51) Kyrgyzstan	(74) *Germany*	(84) *Latvia*
(2) South Africa	(16) Dominican Rep.	(29) Nigeria (E)	(52) Rep. of Korea	(75) Taiwan P. of China	(85) *Netherlands*
(3) Guatemala	(17) Nicaragua (E)	(30) Bolivia (E)	(53) Ghana (E)	(76) *Hungary*	(86) *Luxembourg*
(4) Zimbabwe (E)	(18) Colombia	(31) Uganda (E)	(54) *Lithuania*	(77) *Czech Rep.*	(87) *Ukraine*
(5) Kenya (E)	(19) Malaysia	(32) Jordan (E)	(55) *France*	(78) *Slovenia*	(88) *Spain (E)*
(6) Chile	(20) Sri Lanka	(33) Bahamas	(56) *Japan*	(79) *Denmark*	(89) *Belgium*
(7) Lesotho (E)	(21) Puerto Rico	(34) Singapore	(57) *Bulgaria*	(80) *Russian Fed.*	(90) *Canada*
(8) Panama	(22) Ecuador (E)	(35) Algeria (E)	(58) China	(81) *Italy*	(91) *Finland*
(9) Mexico	(23) Philippines	(36) *Australia*	(59) *Norway*	(82) *Romania*	(92) *Slovakia*
(10) Botswana (E)	(24) Costa Rica	(37) Tunisia (E)	(60) *Moldova*	(83) *Belarus*	
(11) Guinea-Bissau (E)	(25) Peru (E)	(38) Mauritania (E)	(61) *Greece (E)*		
(12) Senegal (E)	(26) Turkey	(39) Morocco (E)	(62) India (E)		
(13) Thailand	(27) Madagascar (E)	(40) Bangladesh	(63) Egypt (E)		
(14) Venezuela		(41) *Estonia*	(64) *United Kingdom*		
		(42) U.R.Tanzania	(65) Indonesia (E)		
		(43) Jamaica (E)	(66) *Portugal*		
		(44) *New Zealand*	(67) Kazakhstan		
		(45) *Ireland*	(68) Lao P.D.R (E)		
		(46) Niger (E)	(69) Pakistan (E)		
		(47) *United States*	(70) Nepal		
		(48) Côte d'Ivoire (E)	(71) *Poland*		
		(49) Mauritius (E)	(72) *Sweden*		
		(50) Viet Nam (E)	(73) Rwanda (E)		

Source: UNCTAD secretariat calculations, based on a data set compiled by Deininger and Squire, *op. cit.* (see also text).

Note: The chart is based on the most recent data reported for each country. These are for 1987 or later, except for Botswana (1986), Bangladesh (1986), France (1984), Germany (excluding the new Länder, 1984), Luxembourg (1983), Japan (1982), Nepal (1984) and Rwanda (1983). Countries are ordered in the chart and the list according to the shares of the richest 20 per cent of the population. The suffix (E) indicates that distribution data for the country concerned are for consumption expenditure shares which, owing to savings, are lower than the income shares used for the other countries.

Table 33

INCOME INEQUALITY SINCE 1970, BY REGION

Region[a]	Number of countries	Gini coefficient (in per cent)			Ratio of richest quintile to poorest		
		1970-1979	1980-1989	1990-1994	1970-1979	1980-1989	1990-1994
Developed market-economy countries	12	31.60	32.02	32.78	5.59	5.56	6.02
Transition economies							
Eastern Europe	4	22.34	22.94	27.85	3.09	3.13	4.05
Russian Federation[b]			26.40	30.53			5.08
China			31.51	36.20		4.74	6.10
Developing countries							
Latin America	10	49.86	51.39		14.46	15.58	
East Asia	7	41.08	40.98		8.29	8.20	
Sub-Saharan Africa[c]	10			44.64			9.52
North Africa[c]	4			38.03			6.57
South Asia[c]	2	31.06	31.73	31.28	4.56	4.71	4.63

Source: As for chart 8, and M.V. Alexeev and C.G. Gaddy, "Income Distribution in the USSR in the 1980s", *The Review of Income and Wealth*, Vol. 39, No. 1, March 1993, table 4A.

  Note: Figures are unweighted averages of Gini coefficients and income or expenditure ratios for available years in each period.

   a *Developed market-economy countries:* Australia, Belgium, Canada, Denmark, Finland, Italy, Netherlands, New Zealand, Norway, Sweden, United Kingdom, United States; *Eastern Europe:* Bulgaria, former Czechoslovakia, Hungary, Poland; *Latin America:* Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Guatemala, Mexico, Panama, Puerto Rico, Venezuela; *East Asia:* Hong Kong, Malaysia, Philippines, Republic of Korea, Singapore, Taiwan Province of China, Thailand; *sub-Saharan Africa:* Ghana, Guinea-Bissau, Kenya, Mauritius, Niger, Nigeria, Senegal, Uganda, United Republic of Tanzania, Zimbabwe; *North Africa:* Egypt, Jordan, Morocco, Tunisia; *South Asia:* India and Pakistan.

   b The Gini coefficient for 1980-1989 is for the former Russian Soviet Socialist Republic and relates to 1988 only.

   c Calculations are based on consumption expenditure and measured inequality is hence not directly comparable with other regions, for which measures are based on income data.

(ii) The variance in inequality is greater among the developing than the developed countries;

(iii) The main difference in the pattern of inequality between developing countries and the developed countries is that the richest 20 per cent of the population receives a much higher proportion of total income in the developing countries than in the developed, whilst the middle 40 per cent receives a much lower proportion. Differences between developing countries and richer countries in shares of the bottom 40 per cent are less marked.

These patterns are apparent for both income and consumption expenditure data, but they are sharpest for the former.

2. Global trends

Regional trends in income inequality are summarized in table 33. On the basis of the Gini coefficient it is evident that so far in the 1990s income inequality has increased sharply from relatively low levels in the former socialist countries of Eastern Europe and also in China. Greater in-

equality is also evident in Latin America in the 1980s. The ratio of the average incomes of the richest to those of the poorest quintiles of the population was over 15:1 in those countries. The ratio is also particularly high in Africa, considering that it is based on expenditure data.

These regional averages mask different country trajectories in inequality. From all available evidence, it is apparent that there were widespread tendencies for inequality to increase during the 1980s.[10] Estimates for 16 developed market economies show that inequality was rising in nine of them. The rise was modest in Belgium, the Netherlands and Germany (a 1-2 percentage point increase in the Gini coefficient) and somewhat greater in Australia, Japan, Sweden, United States and, especially, the United Kingdom. Of the former socialist countries of Eastern Europe, where inequality has increased sharply against the background of shrinking overall income, the Gini coefficient rose by 10 points between 1987 and 1993 in Bulgaria, by over 5 points in Romania, and by between 2 and 5 points in Poland, Hungary and the Czech Republic.

While there was a pronounced tendency for inequality to increase in Latin America during the debt crisis of the 1980s, the subsequent recovery has not been sufficient to reverse this tendency, largely because of sharp changes in policy stance that are discussed in the next chapter. Thus, comparing the Gini coefficient in 1979-1981 with that in 1989-1990, it is apparent that it was higher in the later period in Argentina (Buenos Aires), Brazil, Chile, Panama, and Venezuela (but in Colombia it was lower). The coefficients were relatively stable in Uruguay and Mexico. The latest available statistics on the distribution of income among urban households show that, although there was some improvement, the income shares of the richest 20 per cent of the urban population remained higher in the early 1990s than the early 1980s in Argentina, Brazil, Costa Rica, Mexico, Panama, and Venezuela. Unambiguous declines in inequality are apparent in Uruguay and Bolivia (table 34).

In Africa, it is possible that in some countries there has been a process of "equalizing downwards" across much of the personal income distribution as monetary sectors have contracted relative to subsistence sectors, real wages have fallen and consumer demand for the goods and services of urban informal sector activities has declined. In this process, the rural-urban gap, measured in terms

Table 34

INCOME DISTRIBUTION AMONG URBAN HOUSEHOLDS IN LATIN AMERICA IN VARIOUS YEARS SINCE 1979

(Percentage)

		Share of		
Country	Year	Poorest 40 per cent	Richest 20 per cent	Richest 10 per cent
Argentina[a]	1980	17.4	45.3	30.9
	1986	16.2	48.7	34.5
	1994	13.8	51.1	34.2
Bolivia	1989	12.1	54.3	38.2
	1994	15.1	51.5	35.4
Brazil	1979	11.8	56.0	39.1
	1987	9.8	60.8	44.3
	1993	11.8	58.7	42.5
Chile	1987	12.7	56.1	39.6
	1994	13.4	55.6	40.4
Colombia	1980	11.0	58.8	41.3
	1986	13.1	51.4	35.3
	1994	11.6	57.2	41.9
Costa Rica	1981	18.9	40.1	23.2
	1988	17.2	43.3	27.6
	1994	17.4	43.5	27.5
Guatemala	1986	12.5	52.0	36.4
	1989	12.0	53.5	37.9
Honduras	1990	12.3	55.0	38.9
	1994	13.3	52.5	37.2
Mexico	1984	20.2	41.2	25.8
	1989	16.3	51.3	36.9
	1994	16.8	49.6	34.3
Panama	1979	15.5	45.9	29.1
	1986	14.3	48.9	33.0
	1994	13.8	51.6	37.4
Paraguay[a]	1986	16.4	48.9	31.8
	1994	16.2	49.8	35.2
Uruguay	1981	17.7	46.4	31.2
	1986	17.8	48.3	33.6
	1994	21.7	40.0	25.4
Venezuela	1981	20.1	37.8	21.8
	1986	16.2	45.1	28.9
	1994	16.7	46.4	31.4

Source: ECLAC, *Statistical Yearbook for Latin America and the Caribbean, 1996 Edition* (United Nations publication, Sales No. E/S.97.II.G.1).

a The metropolitan area only.

Table 35

RECENT CHANGES IN INCOME DISTRIBUTION AND PER CAPITA GNP IN SUB-SAHARAN AFRICA

Country	Scope of survey	Year	Gini coefficient[a] (Per cent)		Average annual growth of real GNP per capita[b] (Per cent)
Côte d'Ivoire	National	1985	41.2	44.6	-3.77
		1988	36.9	34.6	
Ethiopia	Rural	1989		40.8	..
		1994		45.1	
Ghana	National	1988	35.9	40.9	1.39
		1992	33.9	40.8	
Kenya	Rural	1981		50.8	-0.31
		1992		55.6	
Mauritius	National	1986	39.6		6.11
		1991	36.7		
Nigeria	National	1986	37.0	38.1	1.09
		1993	37.5	43.5	
Uganda	National	1989	33.0		0.87
		1992	40.8		
United Republic of Tanzania	Rural	1983		53.5	1.14
		1991		76.7	

Source: The source indicated for chart 8, and also C. Jayarajah, W. Branson and B. Sen, *Social Dimensions of Adjustment: World Bank Experience, 1980-1993* (Washington, D.C.: The World Bank, 1996).
  a Figures in the second column for the Gini coefficient are from the second source indicated.
  b From the first to the second year shown.

of the ratio of wage earners' incomes to incomes of farmers on small holdings, has disappeared. An example of "equalizing downwards" is Côte d'Ivoire (see table 35). By contrast, large increases in the Gini coefficient for household expenditures are evident in Uganda, and also in Nigeria according to some estimates. A tendency which is apparent in Kenya, United Republic of Tanzania and Ethiopia is increasing rural inequality.

Turning to Asia, it is apparent that the crude stereotype of East Asia as a zone of "low and decreasing inequality" is a misleading description not only because some of the countries have relatively high levels of inequality, but also because inequality has increased in many parts of East Asia in the 1980s. There was an increase in Hong Kong during 1986-1991 and a particularly sharp one in Singapore during 1979-1983, though it was moderate thereafter. Inequality appears to have been increasing in Taiwan Province of China since 1980, and in the Republic of Korea since the late 1980s. In Thailand the strong upward trend towards greater inequality which started in the mid-1970s, following the shift towards a more export-oriented strategy, continued in the 1980s. Declining inequality is apparent in Indonesia and the Philippines and also, during 1979-1987, in Malaysia, though in that country the downward trend may not have continued in the 1990s. In South Asia, Sri Lanka stands out as a country in which inequality has continued to rise.

3.   Growth and inequality

From the available data set it is possible to trace the evolution of income inequality in 16 developing economies[11] since the late 1960s or early 1970s. Trend analysis indicates no clear relationship between per capita income and inequality. Economies such as those of Taiwan Province of China and Thailand grew relatively rapidly, but inequality increased in the latter case but not in the former. Similarly, growth was slow in both Sri Lanka and the Philippines, but while inequality rose significantly in the former country, it fell in the latter.

The share of total income received by the poorest 40 per cent of the population declined during this period in 11 of the 16 countries, but at a very slow rate. Their absolute per capita income fell only in Venezuela, which is also the only country of the 16 in which there was a downward trend in real GNP per capita over the entire 20-year period. For eight of the nine countries in which the growth of real GNP per capita is statistically significant, the growth in incomes of the poorest 40 per cent is also statistically significant, confirming their dependency on economic expansion for an increase in their income. In Chile and Thailand, in particular, increased inequality has not been associated with the absolute immiseration of the poorest groups thanks to rapid growth. But the main feature of the results is perhaps not these statistical relationships, but rather the finding that the real incomes of the poorest 40 per cent of the population grew by less than $12 per annum (in constant 1987 prices), or declined over this period, in 13 of the 16 countries, the exceptions being the Republic of Korea, Malaysia and Taiwan Province of China.

Trend analysis can be usefully supplemented through analysis of changes in inequality and GNP per capita during shorter episodes of change.[12] One way in which inequality analysts now do this is by focusing on "spells" of change. For each country, a "spell" of distributional change is defined as the time between two comparable and consecutive household surveys. For example, a country for which income distribution data are available in three household surveys (1973, 1980 and 1987) enables analysis to be made for two "spells" (1973-1980 and 1980-1987).

Table 36 shows the results of such analysis for 22 countries, using income rather than consumption expenditure data, which together provide information on 94 spells of change. It is apparent that inequality increases with growth as often as it decreases.[13] But when the sample is broken up into episodes of change during two different periods, distinguishing the period up to and including 1980 and that from 1980 onwards, a major shift is apparent. First, inequality increases in only 42 per cent of the total spells of change in the first period, but in the second it increases in 64 per cent of the total spells. Second, inequality increased in only 17 out of 39 spells in which growth in GNP per capita occurred in the period 1965-1980, but from 1980 to 1995 inequality increased in 19 out of 29 such spells. For spells in which decline in GNP per capita occurred (which are fewer in number) there is also a shift, in the sense that decline was much more likely to be associated with increasing inequality after 1980 than before.

The sample on which these relationships are based was necessarily determined by the availability of data,[14] but the findings suggest that the growth-inequality relationship changed in the 1980s in ways which imply that growth is now more unequalizing.

4.   The changing relative positions of income classes

A more detailed view of how inequality is changing in developing countries can be obtained by examining trends over time in the income shares of the richest 20 per cent, the middle 40 per cent, and the poorest 40 per cent. The charts in the annex to this chapter[15], showing trends for 24 countries since the 1960s, indicate that:

- A recurrent pattern of distributional change in the 1980s was an increase in the income shares of the rich, which was almost invariably associated with a fall in the income shares of the middle class;

- For many countries this was a reversal of trends before 1980, which involved the middle class gaining income shares whilst the rich lost shares.

The countries in which divergence between the rich and the middle classes occurred in the 1980s are diverse. They include Bangladesh (post-1977), Brazil (post-1986), Sri Lanka (post-1973), Mexico

Table 36

RELATIONSHIP BETWEEN GROWTH PERFORMANCE AND CHANGES IN INCOME INEQUALITY IN DEVELOPING COUNTRIES, 1965-1995

Spells associated with:	1965-1980		1980-1995		1965-1995	
	No. of spells	*Per cent of total*	No. of spells	*Per cent of total*	No. of spells	*Per cent of total*
Positive GNP growth per capita						
Inequality increasing	17	*40*	19	*49*	40	*43*
Inequality decreasing	22	*51*	10	*26*	39	*41*
Negative or no GNP growth per capita						
Inequality increasing	1	*2*	6	*15*	8	*9*
Inequality decreasing	3	*7*	4	*10*	7	*7*
Total	43	*100*	39	*100*	94	*100*

Source: As for chart 8.
Note: The countries (and number of spells of change) covered for 1965-1995 are: Bangladesh (6); Brazil (11); Chile (3); Colombia (5); Costa Rica (5); Dominican Republic (1); Gabon (1); Guatemala (2); Honduras (1); Malaysia (4); Mexico (3); Panama (3); Philippines (3); Puerto Rico (2); Republic of Korea (10); Singapore (2), Sri Lanka (4), Taiwan Province of China (10); Thailand (6); Trinidad and Tobago (2); Turkey (2); Venezuela (8). The sum of the spells of change for the periods 1965-1980 and 1980-1995 is less than the number for 1965-1995, because some spells of change were omitted in partitioning the data set. Countries for which data were only available for one period - Turkey, Trinidad and Tobago, Guatemala and the Dominican Republic - were omitted. Spells of change which began before 1980 but ended after 1980 were also omitted, except for Bangladesh (1978-1981), Costa Rica (1977-1981), and Thailand (1975-1981), which were classified as 1965-1980; and Puerto Rico (1979-1989), Venezuela (1979-1981) and Sri Lanka (1979-19781), which were classified as 1980 and onwards. For Taiwan Province of China data after 1976 (which are reported annually) are included as three-year averages.

(post-1977), Panama (post-1980), Venezuela (post-1978), Guatemala (post-1978), Singapore (post-1978), Thailand (post-1975), and United Republic of Tanzania (post-1976). Of the eight cases for which data are available for both the 1970s and the 1980s, there is a reversal from increasing convergence to increasing divergence between the rich and middle classes in six, which was particularly marked in Sri Lanka, Panama and Venezuela. A similar shift also occurred in Hong Kong around 1980, and in India a trend of rich-middle convergence in the late 1980s was reversed after 1990, though it is not clear whether this represents a new trend.

An important feature of these patterns of divergence is the scale of change, in terms of the magnitude of the gap in income shares between the richest 20 per cent and middle class. From table 37, it can be seen that in Thailand, for example,

the gap between the income shares of the richest quintile and the middle class increased from 12 percentage points in 1975 to 28 in 1992, as the richest group increased their share of total income from 48 per cent to 58 per cent and the income share of the middle class fell from 36 per cent to 30 per cent. The extent of change is such that some countries are transforming from 40:40:20 societies into intermediate societies in which the richest quintile receives 50 per cent of the total available income of households, the middle class 36 per cent and the poorest two quintiles 15 per cent; and some intermediate societies, such as Thailand in 1975, are transforming into 60:30:10 societies. For some societies in Latin America with very high income inequality the reversal from rich/middle-class convergence to divergence halted a shift towards a pattern in which the richest quintile received 50 per cent of total income, and re-established an earlier pattern of a very unequal distribution.

Table 37

PERIODS OF INCOME DIVERGENCE AND CONVERGENCE BETWEEN THE RICHEST QUINTILE AND THE MIDDLE CLASS IN SELECTED DEVELOPING COUNTRIES

	Divergence (Income share of middle class falling and share of richest quintile rising)				**Convergence** (Income share of middle class rising and share of richest quintile falling)		
Country	*Period*	Change in gap[a]	Size of gap[b]	*Country*	*Period*	Change in gap[a]	Size of gap[b]
Bangladesh	*1977-1986*	+11	+12	Colombia	*1978-1991*	-7	+21
Brazil	*1982-1989*	+13	+38	Rep. of Korea	*1980-1988*	-3	+4
Chile	*1971-1989*	+19	+37	Malaysia	*1976-1989*	-6	+20
Mexico	*1977-1989*	+10	+29	Turkey	*1968-1987*	-16	+14
Panama	*1980-1989*	+11	+28	Chile	*1989-1994*	-5	+32
Sri Lanka	*1973-1987*	+13	+19	Indonesia	*1976-1993*	-3	+2
Thailand	*1975-1992*	+16	+28	Pakistan	*1979-1991*	-4	0
Venezuela	*1979-1990*	+16	+18	Hong Kong	*1971-1991*	-4	+14
Rep. of Korea	*1969-1980*	+9	+7	Costa Rica	*1977-1989*	-7	+14
India	*1990-1992*	+4	+4	Philippines	*1965-1988*	-9	+19

Source: As for chart 8.
  a From beginning to end of period (percentage points).
  b The share of the richest quintile minus the share of the middle class (percentage points) in the final year.

A second important feature of these patterns is the degree of synchronization in the timing of distributional changes in countries with very different economic structures and cultures. Synchronized shifts can be taken as an indicator that income inequality trends are increasingly being influenced by forces common to all the countries, i.e. forces which are global in character, and not just by particular national circumstances. Precise identification of changes is difficult as the household surveys on which the distributional data are based are not conducted on an annual basis and are for different years in different countries. But it is apparent that in many countries a turning-point from rich-middle class convergence to divergence occurred during the late 1970s and early 1980s, a period when the external environment of developing countries changed considerably. The reversal may also reflect a common domestic policy response to the changed circumstances.

Of the other cases which are depicted in the annex, the Republic of Korea and Chile both exhibit a pattern of increasing divergence between the rich and middle-class income shares during certain periods. However, in both instances there is a reversal in the opposite direction to that observed in the majority of cases. The income divergence is marked in Chile, where from 1971 to 1989 the gap between the shares of the rich and the middle class increased from 18 to 37 percentage points, as the income share of the richest 20 per cent increased from 52 per cent to 63 per cent of total income, whilst that of the middle class declined from 34 per cent to 27 per cent. In the Republic of Korea the share of the middle class in 1969 was actually 2 percentage points greater than that of the richest quintile, but by 1980 the share of the latter was 7 percentage points greater than that of the middle class. There was a change to convergence between the rich and the middle class in Chile from 1989 to 1994 and in the Republic of Korea from 1980 to 1988 (see also table 37).

As regards the other countries in the annex to this chapter, Costa Rica and Taiwan Province of China also show signs of divergence in income shares, particularly since 1985, but it is the poorest 40 per cent that loses shares to the rich, and to the rich and middle class, respectively. A similar

pattern, though much less pronounced, is also apparent in Puerto Rico, with a shift from the 1970s to the 1980s. Tendencies towards rich/middle-class income convergence are apparent in Turkey, Malaysia, the Philippines, Indonesia, and Pakistan, but more so in Turkey than in the other four countries; indeed, the tendency may have been reversed in Malaysia. A characteristic which these five countries have in common is a large Moslem population.[16] Colombia and Jamaica also show tendencies for rich and middle-class incomes to convergence.

The above patterns of change are also evident from a spell-of-change analysis of income shares of different quintile groups, i.e. changes between consecutive surveys. Table 38 classifies patterns of changes in inequality into four basic categories and two sub-categories, showing the frequency of occurrence of these patterns of change before and after 1980, distinguishing between developed and developing countries, and singling out Latin America and East Asia among the developing countries. The patterns of change distinguished are:

Type 1: Share of richest 20 per cent increasing, share of middle class declining, and

    (a) share of poorest 40 per cent rising, or
    (b) share of poorest 40 per cent falling;

Type 2: Share of richest 20 per cent falling, share of middle class rising, and

    (a) share of poorest 40 per cent rising, or
    (b) share of poorest 40 per cent falling;

Type 3: Share of richest 20 per cent and middle class falling;

Type 4: Share of richest 20 per cent and middle class rising.

A number of conclusions can be drawn from table 38:

- The main pattern of change in both developed market economies and developing countries is either type 1 or type 2. It is rare for both the richest quintile and the middle class to be gaining or losing shares together;

- The share of the richest quintile increased more frequently after 1980 than before, particularly in developing countries. In developed market economies, the share of the

richest quintile increased during 46 per cent of the spells of change up to 1980 and 49 per cent from 1980 onwards, while in the developing countries the corresponding increases were 45 per cent and 62 per cent, respectively. The pattern of change in Latin America and East Asia shows a striking similarity. In Latin America, the richest quintile gained in 33 per cent of the spells up to 1980 and 55 per cent of the spells from 1980 onwards; in East Asia the increase was from 50 per cent to 67 per cent. However, unlike East Asia, in Latin America this shift involved a reversal from rich/middle class income convergence in the 1965-1980 period (61 per cent of the spells) to a rich/middle class divergence from 1980 onwards (55 per cent of the spells);

- In developed countries, whenever the richest quintile increased their share and the middle class lost ground (type 1 change), the poorest 40 per cent also tended to lose ground. In developing countries, this pattern is also apparent, though it was more marked in the 1970s, particularly in East Asia;

- In developed countries, whenever the middle class gained ground and the richest quintile lost income shares (type 2 change), the poorest 40 per cent also tended to gain income shares. But in the developing countries, when the middle class gained ground, the poorest 40 per cent were just as likely to gain as to lose income shares in the 1970s, while in the 1980s they were more likely to lose;

- There is a major difference between Latin America and East Asia concerning the changing position of the bottom 40 per cent. In Latin America, this group gained shares in 44 per cent of the spells up to 1980, but in only 30 per cent of the subsequent ones. In East Asia, they gained shares in 41 per cent of the spells up to 1980, but this proportion increased to 44 per cent thereafter.

The findings of this spell-of-change analysis, like that which focuses on growth and inequality, reflect the experience of the countries for which data are available. However, the results suggest that by focusing only on poverty much analysis of the experience of the 1980s has missed some crucial changes which have taken place in income distribution in developing countries, namely: (i) the

PERSONAL INCOME DISTRIBUTION IN 1965-1995, BY REGION: FREQUENCY OF OCCURRENCE OF DIFFERENT TYPES OF CHANGE

Type of change				*Number of spells*							
Direction of change of income share of the:				Developed market economies[a]		Developing countries[b]					
						All regions		Latin America		East Asia	
richest 20 per cent	*middle class*	*poorest 40 per cent*		1965-1980	1980-1995	1965-1980	1980-1995	1965-1980	1980-1995	1965-1980	1980-1995
1(a)	Up	Down	Up	4	1	5	10	3	4	2	5
1(b)	Up	Down	Down	19	27	15	12	3	7	8	4
Total 1	Up	Down	Up/Down	23	28	20	22	6	11	10	9
2(a)	Down	Up	Up	23	22	12	3	4	2	6	0
2(b)	Down	Up	Down	10	14	11	8	7	5	4	2
Total 2	Down	Up	Up/Down	33	36	23	11	11	7	10	2
3	Down	Down	Up	6	6	2	3	1	0	1	3
4	Up	Up	Down	9	12	1	4	0	1	1	3
5		No change		2	1	0	1	0	0	0	1
Others[c]				6	3	0	1	0	1	0	0
Total				79	86	46	42	18	20	22	18

Source: As for chart 8.
  a The countries covered (and number of spells) are: Australia (8); Canada (19); Denmark (3); Finland (10); Germany (5); Ireland (2); Italy (11); Japan (16); Netherlands (8); New Zealand (11); Norway (7); Sweden (13); United Kingdom (26); United States (26).
  b Those listed in table 36, with the addition of Hong Kong (3 spells in each period).
  c Cases where either the share of the richest quintile or of the middle class stays constant while that of the other changes.

increasing share of the richest 20 per cent of the population; and (ii) the declining share of the middle class. Indeed, what may be the main story of the 1980s is that trends of the 1970s, when a relatively richer middle class was emerging, were reversed. It is this group that appears to have been hardest hit in relative terms in the 1980s. In situations of economic decline, the implications of decreasing shares of the middle class are not necessarily as serious as declining shares for the poorest 40 per cent. But the withering of the middle class - and the reinforcement of a pattern of society in which there is a small rich group at the top and a very thin layer of middle class, and the bottom 40 per cent of the population have average incomes about one third to one half of the national average - has important socio-political and economic implications which in the long run are probably more significant for the consumption standards of the poor.

C. Inter-country differences in income inequality

The evidence examined in the previous section indicates that there are important differences among countries in the degree of income inequality, not only between countries at different levels of economic development, but also among those at similar levels. While in general income inequality is greater in developing than in developed countries, there are also significant differences within the developing world.

Why income inequality is greater in some countries than in others is one of the most difficult and intriguing questions for economic analysis. The traditional answer that enjoyed a certain degree of consensus sought to explain these differences in terms of how income distribution changed in association with economic development. According to this view, pioneered by Simon Kuznets, income inequality increases in the early stages of development and then decreases. Under this so-called "inverted-U" hypothesis, income inequality can be expected to be greater in the middle-income countries than in both the least developed countries and the industrialized countries. Underlying this approach is the idea that the economic development process involves a transition from a low-productivity agrarian economy to a high-productivity industrial one. Income inequality tends to rise in the process of industrialization not only on account of earnings differentials between agriculture and industry, but also because of the increased importance of industrial incomes, which are distributed less equally than agricultural incomes. However, as industry takes over and average incomes rise, earnings differentials associated with productivity differences will fall. Consequently, a turning-point will be reached after which income distribution improves as the level of income rises. On this view, therefore, growth is first unequalizing, then equalizing.

An analysis of various forces influencing income distribution in different phases of economic development is undertaken in the subsequent section. Here an assessment is made of the extent to which inter-country differences in income distribution can be attributed to differences in levels of development, and of whether other factors also need to be taken into account.

Evidence based on cross-country analysis of the relationship between per capita income and inequality broadly confirms the existence of the inverted-U pattern in which inequality is lowest in low-income and high-income countries and highest in middle-income countries, although a number of studies failed to establish such a relationship.[17] The evidence analysed above also points to a systematic relationship between inequality and per capita income, particularly when the former is measured in terms of the income shares of the richest quintile and the middle class.

Nevertheless, there can clearly also be considerable variations in income distribution among countries at similar per capita income levels. Attention has been focused on a number of factors in cross-country studies to explain these variations.[18] Although these factors are often closely correlated with income, they are also strongly influenced by policy choices.

The first set of such factors identified in cross-country studies relates to the production structure. Since earnings are usually closely linked to productivity, large productivity differences among different sectors of an economy can be expected to yield a high degree of income inequality unless they are corrected through redistributive policies. Indeed, this is one of the main ideas underlying the original Kuznets thesis. However, there need not be a one-to-one correspondence between average per capita income and inter-sectoral differences in productivity. Therefore, other things being equal, the greater the duality in the structure of production associated with a given average per capita income, the greater the degree of inequality. Indeed a number of studies have found evidence of a close correlation (though not necessarily a linear relationship) between income inequality and a number of variables reflecting the extent of dual-

ity, such as the proportion of wage labour in the total labour force, the share of agriculture in GDP, and the share of primary goods in exports.

A second factor explaining inter-country variations in inequality is population growth. Although the latter generally declines as per capita income rises, there are still considerable variations in population growth rates among countries at similar income levels. Generally, inequality has been found to be greater where population growth is faster. There may be various reasons for this relationship. One is that the dependency burden can be higher for poorer income groups, because of the observed tendency for fertility rates to decline with rising income and education. Another is that faster population growth slows the rate of labour absorption (other things being equal) and thereby reduces the share of labour income in output.

It is generally agreed that one of the most important factors underlying inequality is the level of and access to education. There is a two-way link. On the one hand, an unequal distribution of income tends to prevent the poor investing in education and acquiring skills. As discussed at greater length in chapter V below, this can be a serious impediment to growth. On the other hand, an unequal distribution of educational opportunities leads to greater inequality in income distribution by widening skill and productivity gaps in the working population. In this respect, too, there are considerable variations among countries at similar income levels. In most cross-country studies higher levels of secondary school enrolment are associated with lower levels of inequality. Differences in education are also among the most important factors explaining inequality in labour income within countries. For instance, a recent study of 10 Latin American countries for the 1980s attributed about 25 per cent of inequality among workers' incomes to differences in educational levels, with factors such as sex, ethnic origin, age, occupation, and firm size explaining the rest.[19]

It should, however, be noted that a higher average level of educational attainment is not necessarily associated with less educational inequality. Indeed, according to one estimate educational inequality increases until the average duration of schooling of the labour force reaches about 6.8 years, when further expansion of education is associated with declining inequality. The average educational attainment in most developing countries is below this threshold level,

particularly in sub-Saharan Africa and South Asia.[20] If the above threshold were to hold generally, then educational expansion in all these cases could be associated with increasing educational inequality, particular if emphasis is placed on secondary and higher education, rather than on the education of people without any schooling.

The focus on education highlights the crucial importance of ownership of assets for income distribution. However, inequality in the distribution of human capital is not the only, or even the principal, determinant of income inequality. Distribution of material wealth, and hence of value added between labour and property-owning classes, is equally and even more important. Indeed, large income inequalities are often associated with considerable concentration of material wealth, particularly in developing countries. Exclusive focus on education and human capital thus permits only a partial understanding of the factors influencing distribution in market economies. More importantly, as discussed in chapter V below, it also has the effect of delinking the analysis of growth from that of distribution, for the behaviour of the capitalist class is central to capital accumulation and technical progress, on which the real incomes of both property owners and workers depend.

Just as for incomes, there are considerable variations among countries at similar income levels in the distribution of wealth. Evidence from OECD countries shows that wealth inequality tends to be much higher than income inequality. Gini coefficients of household wealth distribution (ranging from 0.65 to 0.71 in the United Kingdom, Germany, France, Canada, Sweden and Australia, and coming close to 0.80 in the United States and 0.52 in Japan in the 1980s) are considerably above those for income distribution. Although roughly comparable in terms of wealth inequality, Australia has distinctly higher, and Sweden distinctly lower, income inequality than the United Kingdom. However, within individual countries concentration of wealth and of income tends to move together; for instance, in the United States household wealth held by the richest 1 per cent fell from 44 per cent in 1929 to 20 per cent in 1972, but rose to 34 per cent in 1992. Income inequality followed a similar path, dropping significantly in the postwar period, but rising sharply during the past two decades.

There is little information on the distribution of wealth in developing countries. However, data on land ownership show that it was highly concen-

Table 39

INEQUALITY OF LAND DISTRIBUTION IN SELECTED DEVELOPING COUNTRIES AND REGIONS

Country/region		Year/period	Gini coefficient of land distribution
Latin America			
Peru		1961	0.95
Venezuela		1961	0.94
Argentina		1970	0.87
Colombia		1960	0.87
Brazil		1960	0.85
Uruguay		1966	0.83
Asia			
India		1953-1954	0.69
		1961-1962	0.58
		1971-1972	0.59
Indonesia		1973	0.56
Pakistan		1972	0.52
Philippines		1971	0.52
Taiwan Province of China		1960-1961	0.47
Thailand		1978	0.46
Bangladesh		1977	0.45
Middle East and Mediterranean			
Iran (Islamic Republic of)		1960	0.62
Turkey		1960	0.61
Africa			
Botswana	(Traditional holdings)	1968-1969	0.50
Côte d'Ivoire	(Traditional sector)	1973-1975	0.42
Kenya	(Registered smallholdings)	1969	0.55
Malawi	(Smallholdings)	1968-1969	0.41
Mozambique	(Traditional sector)	1970	0.42
	(Modern sector)	1970	0.81
Nigeria	(Northern farm crops)	1963-1964	0.43
	(Eastern farm/tree crops)	1963-1964	0.56
	(Western farm/tree crops)	1963-1964	0.40
Somalia	(Five districts)	1968	0.55
Zambia	(Commercial sector)	1970-1971	0.76
Ghana	(All holdings)	1970	0.64

Source: R.M. Sundrum, *Income distribution in Less Developed Countries* (London and New York: Routledge, 1990); D. Ghai and S. Radwan, "Agrarian change, differentiation and rural poverty in Africa: A general survey", in D. Ghai and S. Radwan (eds.), *Agrarian Policies and Rural Poverty in Africa* (Geneva: ILO, 1983).

trated in Latin America in the 1960s compared to most other countries and regions (table 39). A study on the Republic of Korea suggests that financial assets could well be more unequally distributed than real assets. In the late 1980s, it is estimated that the Gini coefficients in that country for such assets were 0.77 and 0.60, respectively (as against 0.40 for income). At that time 43 per

cent of the wealth was owned by the richest 10 per cent of the population.[21]

The effect of wealth distribution on income inequality can be expected to be stronger in developing countries. Indeed, evidence suggests that for such countries there is a positive and rather strong relationship between the distribution of operational land holdings and income inequality.[22] On the other hand, property incomes appear to constitute a much larger share of total personal income in developing countries than elsewhere. While in the 1980s and early 1990s such incomes ranged from 7 per cent to 16 per cent in Canada, Australia, New Zealand and the United Kingdom, estimates put them as high as 21 per cent in urban Colombia in 1967, 25 per cent in Taiwan Province of China in 1968, and over 20 per cent in Chile in more recent years.[23] An important reason for this contrast (discussed in greater detail in chapter V) is that, while in industrial countries property incomes tend to be retained in corporations and pension funds, in developing countries they are more likely to accrue to households. Comparatively high shares of property income in personal incomes magnify the effects of wealth inequality on income inequality.

It is also generally agreed that socio-political variables are important determinants of equality. In that respect, attention is often drawn to the low level of inequality in the former socialist countries. Again, as noted above, inequality appears to be low, given their GNP per capita, in some countries with a large Moslem population. It has also been suggested that income inequality is lower in rich countries because "societal tolerance for income inequality" is lower. The level of income inequality is seen from this perspective as a social choice which countries make within their structural limits.[24]

It should be noted that these factors offered to explain inter-country differences in income inequality are derived from a comparative static analysis which compares various characteristics of different countries at different levels of development, and hence makes no attempt to describe how inequality may change in the process of national development. This issue is taken up in the following section, where various forces operating on income distribution in different phases of development are discussed.

D. Surplus labour, growth and income inequality

1. Forces making for greater or lesser inequality

While it is very difficult to account fully for inter-country differences in income inequality, it is virtually impossible to construct a single model to describe how income distribution evolves in the course of economic development. Consequently, attention will be focused on a number of key forces that tend to operate on personal income distribution through their effects on various functional categories of income at different phases of development, with the aim of shedding some light on the possible causes of changes that have occurred during recent decades, and on the way policy has influenced these changes.

In societies with surplus labour, which may take the form of open unemployment, underemployment or disguised unemployment in a multiplicity of low-productivity activities, a necessary condition for declining inequality is that demand for labour should increase. But whether increased employment is sufficient to reduce inequality depends on a host of other factors.

For surplus labour to be absorbed, employment opportunities must expand faster than the labour force. Both the rate and labour-intensity of economic growth are thus important. But the population growth rate also affects the speed with which surplus labour is absorbed. If economic and demographic conditions are favourable, a turning-point can be reached at which the surplus labour

is fully absorbed and the labour force is fully and productively utilized.[25] Before that point, changes in income distribution depend on what happens to wages and productivity. If real wages remain constant while employment is expanding and labour productivity is rising, income inequality can be expected to increase.

Initially, much of the surplus labour is in agriculture, and earnings in that sector set a lower limit to real wages in the modern sector. Therefore, how real wages move in the modern sector as surplus labour is absorbed depends very much on productivity and earnings in agriculture. Because of disguised employment, output in agriculture can be kept constant while labour input is reduced. Thus, a transfer of labour to industry would raise average labour productivity, and hence earnings, in agriculture. However, if labour absorption is slow and output per hectare remains constant, then agricultural earnings would remain sluggish and real wages in the modern sector can be kept stable despite increased employment. Under these conditions, income distribution is likely to worsen as surplus labour is absorbed, for reasons which also underlie the inverted-U hypothesis. Although average earnings of labour in the economy as a whole would increase as employment is raised in the modern sector, the dispersion of earnings would be greater to the extent that the gap between the modern and traditional sectors remains large. Furthermore, profits would increase relative to wages. The implication of all this is that a process of industrialization, wherein agriculture considerably lags behind industry, can be expected to result in a significant worsening of income distribution. Furthermore, the slower the pace of accumulation and job creation in industry, the longer the persistence of inequality.

Income distribution can worsen even when agricultural earnings and industrial real wages are both rising. This may happen not only because real wages in industry lag behind productivity growth, but also because inequality in agriculture increases as earnings in different segments of the sector expand at different rates. How far they do so depends, in large part, on the nature of agricultural development. If it is broad-based, benefiting large segments of the rural population, then the forces making for greater equality will be strengthened. In this respect, greater equality in the initial distribution of land would certainly be a key factor. However, the labour intensity of agricultural development also plays an important role. If labour is released faster than it can be productively absorbed by industry, then the surplus labour would simply be transferred from rural areas to the urban informal sector, exerting a downward pressure on real wages.

Once the surplus labour is fully absorbed, growth would slow down and be restricted to what can be attained through increases in the labour force and in productivity. At this point the labour market would tighten, creating forces making for greater equality. Sustained growth of real wages depends on continuous upgrading to technology- and skill-intensive products. Such a process can again lead to greater inequality if there are shortages of skilled labour. However, without upgrading, there is a danger that real wages will need to fall in order to ensure competitiveness with newly emerging low-cost producers. If rapid investment and technological progress enhance labour productivity and ensure competitiveness while education policies continuously upgrade skills, rapid wage growth can be sustained and in such circumstances income inequality may start to decline.

Changes in income distribution are also a function of the strength of the underlying tendency towards increasing inequality that is inherent in the relationship between wealth accumulation and income inequality. This tendency is rooted in the simple fact that wealth created through industrialization and accumulation tends to be concentrated in the hands of the rich, constituting the basis for greater income inequality. The degree of concentration of wealth, and hence its effects on distribution, in turn, depends on how far the initial stages of development led to inequality.

These considerations suggest that policies can play a key role in changes in income distribution. In the early stages of labour absorption, agricultural policies, as well as policies designed to accelerate accumulation in industry, greatly influence both the speed with which the surplus labour is absorbed and the pattern of income distribution. Industrial, education and manpower policies gain added importance as the economy moves up the technology ladder.

2. The experience

The sequence of changes in an economy with labour surplus described above is stylized. But the operation of various forces, some making for

greater inequality and others making for less, is apparent in the recent experience of three groups of countries: first, those which passed the turning-point at which labour surplus is absorbed, and have also upgraded their production structure (e.g. Japan and the first-tier NIEs); second, those which have been successfully absorbing the surplus labour through sustained and rapid growth, but so far without significant industrial upgrading (e.g. Chile, Malaysia, Mauritius and Thailand); and third, those which have not been able to sustain rapid growth and absorb surplus labour. The last group contains the vast majority of developing countries, although there is considerable difference among them in the degree of industrialization achieved. In a number of them, notably the middle-income countries, the surplus labour is primarily in the urban sector, while in others it is largely in rural areas, although urban unemployment and underemployment can still be significant.

Changes in the pattern of income distribution vary considerably in the earlier stages among the countries in the first two groups, in large part because of differences in their initial distribution of wealth and the policies pursued for agricultural development and industrial accumulation. The most successful East Asian economies, namely Japan during its high-growth period and the first-tier NIEs, started with a substantial labour surplus.[26] Both Taiwan Province of China and the Republic of Korea were typical of most developing economies in that the surplus was in rural areas; in Japan many people returned to the primary sector after military demobilization, while in Hong Kong and Singapore there were high levels of urban unemployment and underemployment.

In Japan, income inequality increased from 1953 until the early 1960s, when full employment was reached, largely because of divergent income trends for agricultural and non-agricultural households and because the share of profits rose in industry. After the turning-point, income inequality decreased as both of these trends were reversed. The precise timing of the turning-point is less clear in the Republic of Korea, but it appears to have been in the second half of the 1970s. The country started with a relatively equal income distribution due in large part to a high degree of equality in land ownership. There was little change in overall income inequality, as measured by the Gini coefficient, during 1964-1970; the shares of the richest quintile and the middle class declined slightly, while that of the bottom 40 per cent rose (see annex).

However, income inequality rose sharply thereafter until 1976, principally because real wage growth, though rapid, lagged considerably behind productivity growth. The labour market tightened in the second half of the 1970s, when there was a phenomenal growth in real wages, closely tracking rising labour productivity growth. Starting in 1980, the share of the poorest 40 per cent rose at the expense of the richest 20 per cent, while that of the middle class was constant. Demand for skilled labour increased considerably because industrial upgrading started before full employment had been reached. However, wage differentials both between college and high school graduates and between college and elementary school leavers fell from 1976 onwards after rising in the earlier period, thanks in large part to education policies.

The full employment turning-point was passed in Taiwan Province of China earlier than in the Republic of Korea, in the late 1960s. Income distribution improved significantly in the 1950s, but in most of the following decade it changed little largely because equalizing and unequalizing forces were broadly in balance. The share of agricultural incomes declined rapidly, and there was a significant rise in non-agricultural property income. However, inequality declined considerably within agriculture. Furthermore, the falling share of agriculture took place in the context of a rapid transformation of the sector, which constantly raised productivity and hence the lower limit of industrial wages. Real wages in rural industries, which absorbed an important part of the surplus labour, indeed rose, whereas they remained relatively stable in urban industries. After the turning-point, the decline in inequality in non-agricultural income on account of a strong rise in real wages and labour share reinforced the continuing downward trend in inequality in agriculture, underlying a steady rise in the share of the middle classes (see the annex to this chapter).

The experience of Taiwan Province of China in the 1950s highlights the importance of agricultural policies for income distribution in the early stages, where much greater attention was paid than in the Republic of Korea to an early modernization of agriculture. A combination of price, investment and support policies was used in order to generate rapid and broad-based agricultural growth as well as a large surplus for accumulation in industry. At the beginning a land reform was implemented, reducing farm rents, which had been the main mechanism of agricultural surplus transfer; ten-

ants became owner-cultivators and landowners were encouraged to become involved in industrial development. Government policies caused the domestic terms of trade to move sharply against farmers, but agricultural output expanded rapidly, by 78 per cent from 1952 to 1964, and output per worker and farm household income per capita increased by about 35 per cent and 10 per cent, respectively.[27] Productivity and production increases were founded on public investment, particularly in irrigation and flood control, introduction of new seed varieties, increased application of fertilizer, and diversification introduced through government-supported research agencies. As earlier in Japan, both yields and labour input per hectare rose in rice cultivation. Productivity improvements did not therefore displace labour initially, and in consequence agricultural expansion contributed to the absorption of surplus labour. Both rich and poor farmers participated in the expansion. Moreover, farm incomes of poorer households were supplemented through employment in rural industries. The net result was a substantial reduction in income inequality, which available statistics suggest was the sharpest experienced by the economy since the war, with the Gini coefficient dropping from 0.55 in 1953 to 0.32 in 1964.[28]

This pattern of increasing labour intensity with increasing labour productivity is of wider relevance for all East Asia, since it is intrinsic to the nature of wet-rice agriculture. Indeed, in Java surplus labour is now being absorbed in rural areas through shifts from marginal low-earning activities to rice cultivation, coinciding with the growth in formerly marginal off-farm activities, which are becoming more lucrative with the expansion of rice production and public investment in infrastructure. This pattern of change appears to explain how low-income rural groups in Indonesia have been able to increase their incomes, although the turning-point has not been reached and there is not as yet any strong upward pressure on rural wages.[29]

Again, the contrasting experiences of Thailand and Malaysia clearly show that agricultural policies can play a key role in determining whether growth in the early stages of development is equalizing or unequalizing. In the first country, agriculture has been neglected even though over 60 per cent of the labour force is still engaged in that sector. Agricultural growth has been based in particular on extension of the area under cultivation through the opening up of new lands, often forest land designated as reserves. Labour productivity is very low, and value added per worker in agriculture is estimated to have fallen between 1971 and 1991; in the latter year it was less than one tenth that of industry. In Malaysia, by contrast, opening up of new land has also been an important mechanism of agricultural growth, but the process was more carefully managed, founded on government-sponsored programmes of agricultural investment and productivity growth, and linked to the New Economic Policy (1971-1990) which aimed to increase the asset ownership of indigenous Malays. In 1991, value added per worker in agriculture was three times higher than in Thailand, and the labour productivity gap between industry and agriculture was much smaller.[30] Growth has been less unequalizing in Malaysia (see the annex to this chapter), though the overall pattern, which in contrast to Thailand was slightly downward until the mid-1980s, obviously reflects various other influences, including a policy of asset redistribution towards the indigenous Malays and the greater importance of public sector employment.[31]

As noted above, even though neglect of agriculture can be unequalizing, it does not follow that agricultural growth as such is always equalizing. Indeed, an important feature of various episodes of agro-export booms in Latin America and Africa is their effect of widening inequality among farmers, especially where plantations and peasant production coexist, but also among smallholders. An example is Malawi, where there is marked dualism between the estate sector and smallholder sector, but also significant differentiation within the latter. The economy grew rapidly in the 1970s on the basis of agro-exports, but the Gini coefficient among smallholder families more than doubled.[32] In Latin America, although smallholders do have some labour and management advantages, their ability to adopt new crops and techniques is restricted by factors such as unfavourable input and output prices compared to large-scale producers, high transaction costs and limited access to credit. These can lead to land concentration in which small-scale producers sell up, as seen during the recent agro-export boom in Chile founded on fruit production. Unequalizing agricultural growth, together with the existence of a sizeable surplus of labour, may account for the increased share of the richest quintile in Chile at the expense of the middle 40 per cent in the earlier years of expansion in the 1980s, while subsequent tightening of the labour market appears to have been an important factor in the improvements in the 1990s (see annex).[33]

While most developing countries have not been able to sustain rapid growth so as to absorb their surplus labour, they have nevertheless had episodes of rapid growth. As in the above examples, changes in income distribution were of varying patterns during such periods according to the balance of various forces in different countries, and it is not possible to make generalizations. Nevertheless, it appears that in economies where the surplus labour was in urban areas, growth was often associated with a narrowing of the rich-middle class gap, with no significant relative improvement at the bottom. One plausible explanation is that growth was neither sufficiently rapid nor sufficiently labour-intensive to absorb the surplus labour, which consequently remained in the informal sector. Since formal and informal labour markets are often segmented, the existence of a large population of urban poor does not always influence wage movements in the formal sector and hence the distribution between the top (richest) quintile and the middle class.

The evidence presented above suggests that in general in economies with considerable surplus labour, inequality tends to widen when growth collapses. Increased unemployment and reduced real wages often lead to shrinking income shares of the middle classes. The urban and rural poor, the bottom 40 per cent, are generally less affected in relative terms than the middle class by contraction of economic activity, because they are not properly integrated into the formal economy; they often rely on self-employment, which provides some protection against sharp declines in incomes. This is particularly the case for those who depend primarily on subsistence agriculture. As noted above, in such cases, economic declines can even coincide with a rise in the share of the poor engaged in the subsistence sectors. By contrast, where the poor are concentrated in urban areas, their incomes tend to decline with activity in the formal economy because of their greater dependence thereon.

In many middle-income countries with considerable surplus labour, particularly in Latin America, the deteriorating relative position of the middle classes vis-à-vis the richest quintile since the early 1980s reflects the influence of a number of factors. That their income share should fall when growth collapsed is hardly a matter for surprise, but it also fell when growth remained positive, though moderate, because measures taken to attain a swift and sizeable payments adjustment, such as devaluations and cuts in investment, had serious consequences for real wages and employment. This is perhaps an important reason for the observed shift in the relationship between growth and inequality discussed above. Another reason relates to policies and explains why the subsequent recovery did not result in a reversal of the relative position of the middle classes; the drastic turnaround in economic policies, particularly the liberalization of trade and finance, appears to have changed the balance of forces in favour of those making for greater inequality - an issue which is taken up in the following chapter.

E. Conclusions

The evidence examined above shows that it is very difficult to make generalizations about how income distribution changes with economic development. Perhaps one of the few definite conclusions that can be drawn is that none of the countries that successfully closed the income gap with the advanced industrial countries in the post-war period, namely Japan and the first-tier NIEs, has a very high degree of inequality. It is difficult to venture beyond this conclusion, since a number of countries at much lower levels of industrialization and development have income distribution as equal as and even more equal than the successful late industrializers. Moreover, contrary to a widespread perception, income distribution did not constantly improve throughout the industrialization process in these successful countries.

The balance of forces appears to be weighted towards those making for greater income inequal-

ity during the initial stages of labour absorption. However, increasing inequality is not inevitable, much depending on agricultural policies. In Japan, the Republic of Korea and Taiwan Province of China agricultural growth was founded on land reform, which resulted in a relatively equal initial asset distribution. Policies in Japan and Taiwan Province of China resulted in a widely shared agricultural growth which played a key role in maintaining a relatively stable income distribution in earlier periods of industrialization. By contrast the Republic of Korea experienced sharply rising income inequality.

In general, during the phase of labour absorption there is a tendency for profits to rise as real wages lag behind productivity. If profits are not reinvested, the growth process will slow down and inequality may persist. An important aspect of policy must thus be to ensure that profits are saved and invested to create jobs and new wealth, rather than consumed. As discussed in chapter V, in this respect there are considerable variations among developing countries, and successful countries stand out by their high savings and investment from profits, stimulated by policies discussed in chapter VI.

The balance of forces making for more or less inequality after the full absorption of surplus labour depends on a host of factors, including manpower policies and industrial upgrading. Carefully designed industrial policies can prevent pressures from building up on wages as a result of the emergence of low-cost competitors by facilitating industrial upgrading. An adequate and increasing supply of educated labour can prevent skill shortages leading to widening wage differentials at this point. As examined in detail in *TDR 1996*, the first-tier NIEs have been generally successful on both fronts, whereas the second-tier NIEs still lag considerably behind.

Again, evidence does not support the view that outward orientation is associated with greater income equality. Inequality in a number of countries in East and South-East Asia with very strong export orientation is as high as or even higher than in countries which have relied on domestic markets and import substitution. A careful examination of the East Asian experience finds no support for the notion that improved equality was associated with a switch from import substitution to export-oriented development policies. As examined in detail in *TDR 1996,* this distinction makes little sense in East Asia, where export promotion was combined with

import protection so as to accelerate accumulation and productivity growth. As the late Michael Bruno put it, commenting on the findings of cross-country studies linking employment performance with outward-orientation:

> The good outward-looking performers ... had a good employment record not necessarily because of a preference for exports over import substitution. Most likely they did better because their general macropolicy stance (fewer stop-go policies, etc.) and other conditions (e.g. foreign exchange availability) helped them grow more rapidly and thus absorb their labour force.[34]

Policies seeking to determine the form, speed and timing of integration into the world economy have certainly played a key role in managing the growth-distribution linkages in the first-tier NIEs both during the earlier stages of surplus labour absorption and in the subsequent period of upgrading. In none of the economies was economy-wide trade and financial liberalization undertaken before surplus labour was absorbed; nor was sector-specific exposure of the domestic market to foreign competition undertaken before attaining significant productivity growth and learning. These countries indeed never resorted to the kind of abrupt shifts in trade and financial policies implemented in recent years in some developing countries.

Evidence strongly suggests that while rapid growth does not guarantee improvement in income distribution, economic decline is usually associated with greater inequality. In countries where there is a sizeable surplus labour delinked from the formal economy, decline tends to be associated with a squeeze of the middle classes, as happened widely during the 1980s. However, the relationship between growth and equality appears to have undergone a major transformation in a number of countries, where there has been no tendency for rising inequality to be reversed despite some recovery in the 1990s. This phenomenon appears to be closely related to a sudden shift in policies giving much greater role to market forces.

These economies characterized by surplus labour may now require even more rapid growth than in the past in order to improve distribution. The challenge is to put in place policies to accelerate capital accumulation and productivity growth and shift the balance of forces towards those making for less inequality. Their policy environments differ in three respects from the first-tier NIEs,

rendering this challenge particularly difficult to meet. Firstly, in Latin America a large proportion of the surplus labour is urban, and in Africa both urbanization and population growth rates are very high. Second, in both continents ownership of and access to land is highly concentrated and educational attainments are very unequally distributed. Finally, the "big bang" approach to liberalization in many of these countries seems to have changed the balance of forces in favour of those making for greater inequality without generating any additional stimulus to growth. ■

Notes

1   On outward orientation see A. O. Krueger, *Trade and Employment in Developing Countries*, Vol. 3 - *Synthesis and Conclusions* (Chicago and London: University of Chicago Press, 1983); M. Schiff and A. Valdés, *The Political Economy of Agricultural Pricing Policy*, Vol. 4 - *A Synthesis of the Economics in Developing Countries* (Baltimore and London: Johns Hopkins University Press for the World Bank, 1992). For a discussion of East Asia as an example of rapid growth with equality, see *The East Asian Miracle: Economic Growth and Public Policy* (New York: Oxford University Press for the World Bank, 1993); and also N. Birdsall, D. Ross and R. Sabot, "Inequality and Growth Reconsidered: Lessons from East Asia", *The World Bank Economic Review*, Vol. 9, No. 3, 1995. On the relationship between trade and distribution, see F. Bourguignon and C. Morrison, *External Trade and Income Distribution* (Paris: OECD Development Centre Studies, 1989); M. Ahluwalia, "Inequality, Poverty and Development", *Journal of Development Economics*, Vol. 3, No. 4, Dec. 1976; G. Papanek and O. Kyn, "Flattening the Kuznets Curve: The Consequences for Income Distribution of Development Strategy, Government Intervention, Income and the Rate of Growth", *Pakistan Development Review,* Vol. 26, No. 1, 1987; and A. Wood, *North-South Trade, Employment and Inequality: Changing Fortunes in a Skill-driven World* (Oxford: Clarendon Press, 1994).

2   For the relationships between ethical principles and income distribution, see D. Lal, "Distribution and Development: A Review Article", *World Development*, Vol. 4, No. 9, 1976; and A.K. Sen, *Inequality Revisited* (Oxford: Clarendon Press, 1992); and for an alternative approach to social justice, see G. Rodgers, C. Gore and J.B. Figueiredo (eds.), *Social Exclusion: Rhetoric, Reality, Responses* (Geneva: International Institute for Labour Studies, 1995).

3   On these problems see W. Van Ginneken, "Generating Internationally Comparable Income Distribution Data: Evidence from the Federal Republic of Germany (1974), Mexico (1978) and the United Kingdom (1979)", *The Review of Income and Wealth*, Series 28, No. 4, 1982; A Berry, "On Trends in the Gap Between Rich and Poor in Developing Countries: Why we Know so Little", *ibid*., Series 31, No. 4, 1985; A. Berry, "Evidence on the Relationships among Alternative Measures of Concentration: A Tool for the Analysis of LDC Inequality", *ibid.,* Series 33, No. 4, 1987.

4   For a description of this statistical material see K. Deininger and L. Squire, "A New Data Set Measuring Income Inequality", *The World Bank Economic Review*, Vol. 10, No. 3, 1996. The complete data set can be accessed through the Internet (http://www.worldbank.org/html/prdmg/grwthweb/growth-t.htm).

5   Some of the distribution statistics relate to households, while others relate to persons, and incomes are reported either gross or net. No attempt is made to adjust for these differences in the present analysis.

6   Throughout this chapter, the term "middle class" is used to refer to the 40 per cent of the population with incomes between the richest 20 per cent and the poorest 40 per cent.

7   Because of higher savings in upper income groups, inequalities in consumption expenditure are generally less than those in income. Some of the developing countries classified as intermediate or "40:40:20" societies on the basis of expenditure data may therefore be "60:30:10" or intermediate societies, respectively, if their classification could be made on the basis of income data.

8   According to Indonesian national survey data, the Gini coefficient for household consumption expenditure per capita was 0.34, 0.38 and 0.33 in 1976,

1978 and 1981, respectively; for income per capita it was 0.47, 0.47 and 0.44 in 1976, 1978 and 1982, respectively. See A. Booth, "Income Distribution and Poverty", ch. 10 in A. Booth (ed.), *The Oil Boom and After: Indonesian Economic Policy and Performance in the Suharto Era* (Oxford: Oxford University Press, 1991).

9   S. Kuznets, "Economic Growth and Income Inequality", *The American Economic Review*, Vol. XLV, No. 1, March 1955, p. 22.

10   This section draws on A.B. Atkinson *et al.*, *Income Distribution in OECD Countries: Evidence of the Luxembourg Income Study*, OECD Social Policy Studies No.18 (Paris, 1995); B. Milanovic, "Income, Inequality and Poverty during the Transition: A Survey of the Evidence", *MOCT: Economic Policy in Transitional Economies*, Vol. 6, No. 1, 1996; O. Altimir, "Income Distribution and Poverty through Crisis and Adjustment", *CEPAL Review,* No. 52, April 1994; A. De Janvry and E. Sadoulet, *Poverty, Equity and Social Welfare: Determinants of Change over Growth Spells*, Issues in Development Discussion Paper, No. 6 (Geneva: ILO, 1995); G. Psacharopoulos *et al., Poverty and Income Distribution in Latin America: The Story of the 1980s,* Latin America and the Caribbean Technical Department Regional Studies Programme, Report No. 27 (Washington, D.C.: The World Bank, 1996); R. Infante, "Labour Market, Urban Poverty and Adjustment: New Challenges and Policy Options", in G. Rodgers and R. van der Hoeven (eds.), *The Poverty Agenda: Trends and Policy Options* (Geneva: International Institute for Labour Studies, 1995); C. Jayarajah, W. Branson, and B. Sen, *Social Dimensions of Adjustment: World Bank Experience 1980-93* (Washington, D.C.: World Bank, 1996); V. Jamal and J. Weeks, *Africa Misunderstood, or Whatever Happened to the Rural-Urban Gap?* (London: Macmillan, 1993); V. Jamal (ed.), *Structural Adjustment and Rural Labour Markets in Africa* (London: Macmillan, 1995); and M. Krongkaew, "Income Distribution in East Asian Developing Countries", *Asia-Pacific Economic Literature*, Vol. 8, No. 2, Nov. 1994.

11   Bangladesh, Brazil, Chile, Colombia, Costa Rica, Malaysia, Mexico, Panama, Philippines, Republic of Korea, Sri Lanka, Taiwan Province of China, Thailand, Venezuela (income data); India and Pakistan (consumption expenditure data).

12   The importance of episodes of change in inequality analysis is stressed in A. Atkinson, "Bringing Income Distribution in from the Cold", *Economic Journal*, Vol. 107, March 1997.

13   Such a pattern is also observed by G. Fields in his "Changes in Poverty and Inequality in Developing Countries", *The World Bank Research Observer*, Vol. 4, No. 2, 1989, and "Income Distribution in Developing Economies: Conceptual, Data, and Policy Issues in Broad-based Growth", chap. 4, in M. G. Quibria (ed.), *Critical Issues in Asian Development: Theories, Experiences and Policies*

(Hong Kong, Oxford and New York: Oxford University Press, 1985).

14   For another view of the growth-inequality relationship, which covers only the 1980s and for some countries uses expenditure data and for other countries income data, see M. Ravallion and S. Chen, "What Can New Survey Data Tell us about Recent Changes in Distribution and Poverty?", *World Bank Policy Research Paper*, No. 1694 (Washington, D.C., 1996). The authors found that in developing countries "growth tends to be associated with slightly higher inequality and polarization" (p. 30), but this conclusion is only statistically robust for polarization, and there was an equal likelihood for inequality to rise or fall with growth.

15   The charts are based on data from the sources indicated for chart 8, except for the United Republic of Tanzania, where they are from H. Tabatabai, *Statistics on Poverty and Income Distribution: An ILO Compendium of Data* (Geneva: ILO, 1997).

16   This pattern requires further exploration, particularly as at their level of per capita income, countries with large Moslem populations also appear to have relatively low levels of inequality. For such an attempt, see G.A. Jekle, "*Zakat* and Inequality: Some Evidence from Pakistan", *The Review of Income and Wealth*, Series 40, No. 2, June 1994.

17   For key early contributions to the debate see I. Adelman and C. T. Morris, *Economic Growth and Social Equity in Developing Countries* (Stanford, CA: Stanford University Press, 1973); F. Paukert, "Income Distribution at Different Levels of Development: A Survey of Evidence", *International Labour Review*, Aug.-Sep. 1973; M.S. Ahluwalia, *op. cit.* For more recent discussions see S.M. Randolph and W.F. Lott, "Can the Kuznets Effect be Relied on to Induce Equalizing Growth?", *World Development*, Vol. 21, No. 5, 1993; R. Ram, "Economic Development and Inequality: An Overlooked Regression Coefficient", *Economic Development and Cultural Change*, 43, 1995; S.K. Jha, "The Kuznets Curve: A Re-assessment", *World Development*, Vol. 24, No. 4, 1996; and M. Bruno, M. Ravallion and L. Squire, "Equity and Growth in Developing Countries: Old and New Perspectives on the Policy Issues", *World Bank Policy Research Paper,* No. 1563 (Washington, D.C., 1996).

18   See, for example, H. Chenery and M. Syrquin, *Patterns of Development 1950-1970* (Oxford: Oxford University Press, 1975); M.S. Ahluwalia, *op. cit.*; J. Cromwell, "The Size Distribution of Income: An International Comparison", *The Review of Income and Wealth*, Series 23, No. 3, 1977; G. Papanek and O. Kyn, *op. cit.;* A. Fishlow, "Inequality, Poverty, Growth: Where Do We Stand?", in Michael Bruno and Boris Pleskovic (eds.), *Annual World Bank Conference on Development Economics* (Washington, D.C.: The World Bank, 1995); F. Nielsen, "Income Inequality and Industrial Development: Dualism Revisited", *American Sociological Review*, Vol. 59, Oct. 1994.

19   See Psacharopoulos *et al.*, *op. cit.*

20   On the inequality turning-point see R. Ram, "Educational Expansion and Schooling Inequality: International Evidence and Some Implications", *The Review of Economics and Statistics,* Vol. LLXXII, 1990.

21   For wealth inequality in OECD countries, see E. Wolff, "International Comparisons of Wealth Inequality", *The Review of Income and Wealth*, Series 42, No. 4, December 1996. On the Republic of Korea see D. Leipziger *et al.*, *The Distribution of Income and Wealth in Korea* (Washington, D.C.: The World Bank, Economic Development Institute, 1992).

22   See N.T Quan and A.Y.C. Koo, "Concentration of Land Holdings: An Empirical Investigation of Kuznets' Conjecture", *Journal of Development Economics*, Vol. 18, 1985; for a dissenting view see G. Wignaraja, "Concentration of Land Holdings and Income", *ibid.*, Vol. 29, 1988.

23   These estimates are derived from P. Saunders, H. Stott and G. Hobbes, "Income Inequality in Australia and New Zealand: International Comparisons and Recent Trends", *The Review of Income and Wealth,* Series 37, No. 1, 1991; P. Ryan, "Factor Shares and Inequality in the UK"*, Oxford Economic Review*, Vol. 12, No. 1, 1996; M. Wolfson, "Stasis amid Change: Income Inequality in Canada, 1965-83", *The Review of Income and Wealth*, Series 32, 1986; G. Fields, "Income Inequality in Urban Colombia: A Decomposition Analysis", *ibid.*, Series 25, No. 3, 1979; J. Fei, G. Ranis and S. Kuo, *Growth with Equity: The Taiwan Case* (New York: Oxford University Press, 1979); and A. Guardia, "Distribución del Ingreso en Chile, 1990-1993, según la Encuesta de Hogares", *Estadística y Economía,* 10 (Santiago: Instituto Nacional de Estadística, June 1995).

24   See B. Milanovic, "Determinants of Cross-country Income Inequality: An Augmented Kuznets Hypothesis", *World Bank Policy Research Working Paper*, No. 1246 (Washington, D.C.: The World Bank, 1994).

25   The issue here is the elimination of structural unemployment. After the turning-point, the economy can still have cyclical unemployment, owing to fluctuations in economic activity.

26   The discussion in this subsection draws on: R. Minami, *The Turning Point in Economic Development: Japan's Experience*, Economic Research Series, No. 14, Institute of Economic Research, Hitotsubashi University (Tokyo: Kinokuniya Bookstore Co., 1973); T. Mizoguchi and N. Takayama, *Equity and Poverty under Rapid Economic Growth: The Japanese Experience*, Economic Research Series, No. 21, Institute of Economic Research, Hitotsubasbi University (Tokyo: Kinokuniya Company Ltd., 1984); Moo-Ki Bai, "The Turning Point in the Korean Economy", *The Developing Economies*, Vol. 20, No. 1, March 1982; Won-Duck Lee, "Economic Growth and Earnings Distribution in Korea", chap. 4 in T. Mizoguchi (ed.), *Making Economies More Efficient and more Equitable: Factors Determining Income Distribution*, Economic Research Series No. 29, Institute of Economic Research, Hitotsubashi University (Tokyo: Kinokuniya Company Ltd. and Oxford University Press, 1991); D.-I. Kim and R.H. Topel, "Labour Markets and Economic Growth: Lessons from Korea's Industrialization, 1970-1990", chap. 7 in R.B. Freeman and L.F. Katz (eds.), *Differences and Changes in Wage Structures* (Chicago and London: University of Chicago Press, 1995); J.C.H. Fei, G. Ranis and S.W.Y. Kuo, *Growth with Equity: The Taiwan Case* (Oxford: Oxford University Press, 1979); R. Hung, "The Great U-turn in Taiwan: Economic Restructuring and a Surge in Inequality", *Journal of Contemporary Asia*, Vol. 6, No. 2, 1996.

27   As in the Republic of Korea, there was a shift from "taxing" to subsidizing agriculture in the early 1970s. For agricultural pricing policy in East Asia, see K. Anderson and Y. Hayami, *The Political Economy of Agricultural Protection: East Asia in International Perspective* (Sydney and London: Allen and Unwin, 1986); and M. Moore, "Economic Structure and the Politics of Sectoral Bias: East Asian and Other Cases", *Journal of Development Studies*, Vol. 29, No. 4, July 1993; figures cited in the text for output and income changes are taken from M. Karshenas, *Industrialization and Agricultural Surplus* (Oxford and New York: Oxford University Press, 1995).

28   See J.C.H. Fei, G. Ranis and S.W.Y. Kuo, *op. cit.*

29   For the labour-absorbing nature of agricultural growth in East Asia see S. Ishikawa, *Economic Development in Asian Perspective* (Tokyo: Kinokuniya Bookstore, 1967); and *Labour Absorption in Asian Agriculture* (Bangkok: ILO-ARTEP [Asian Regional Team for Employment Promotion], 1978). For a discussion of rural Java, see D. Mazumdar and P. Basu, "Macro-economic Policies, Growth and Employment: The East and Southeast Asian Experience", Paper No. 7, prepared under the ILO/UNDP project "Economic Policy and Employment"; C. Manning, "What has Happened to Wages in the New Order?", *Bulletin of Indonesian Studies*, Vol. 30, No. 3, Dec. 1994.

30   See D. Mazumdar and P. Basu, *op. cit.*

31   This policy aimed to increase indigenous Malays' (*bumiputra*) corporate ownership and breakdown ethnic compartmentalization of economic activities whereby Indians and Chinese dominated trade and industrial activities. A specific goal was to increase Malay share ownership from 3 per cent of total share capital in 1971 to 30 per cent in 1991, mainly by reducing the proportion owned by foreigners (from 63 per cent to 30 per cent).

32   See F. Pryor, "Changes in Income Distribution in Poor Agricultural Nations: Malawi and Madagascar", *Economic Development and Cultural Change*, Vol. 9, No. 1, Oct. 1990.

33   For the effects of agro-export booms in Latin America, see M.R. Carter and B.L. Barham, "Level

Playing Fields and *Laissez-faire*: Post-Liberal Development Strategy in Inegalitarian Agrarian Economies", *World Development*, Vol. 24, No. 7, 1996; and M.R. Carter and D. Mesbah, "Can Land Market Reform Mitigate the Exclusionary Aspects of Rapid Agro-export Growth?", *ibid.*, Vol. 21, No. 7, 1993. For analysis of a cross-over in which inequality within agriculture increases and then exceeds that in non-

agriculture, see R. Weisskoff, "Income Distribution and Economic Change in Paraguay, 1972-88", *The Review of Income and Wealth*, Series 38, No. 2, 1992.

34   M. Bruno, "Comments on 'The Relationship between Trade, Employment and Development'", in G. Ranis and T.P. Schultz (eds.), *The State of Development Economics: Progress and Perspectives* (Oxford: Basil Blackwell, 1988), p. 384.