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Income Distribution And Development*

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Income distribution is extremely important for development, since it influences the cohesion of society, determines the extent of poverty for any given average per capita income and the poverty-reducing effects of growth, and even affects people's health. The paper reviews the connections between income distribution and economic growth. It finds that the Kuznets hypothesis that income distribution worsens as levels of income increase is not at all strongly supported by the evidence, while growth rates of income are not systematically related to changes in income distribution. However, evidence is accumulating that more equal income distribution raises economic growth. Both political and economic explanations have been advanced. The finding suggests that more equal income distribution is desirable both for equity and for promoting growth.

Strategies to promote more egalitarian growth are reviewed, with examples given. However, although these strategies seem both feasible and desirable, in the 1980s and 1990s there has been a strong tendency for income distribution to worsen in both developed and developing countries. A variety of explanations as to the cause for this have been advanced including trade liberalization, technology change, and the impact of liberalization and globalization more generally. Most of the paper is concerned with the distribution of pre-tax household income. A brief survey of findings on the incidence of taxation and expenditure shows that tax incidence is often neutral, or proportionate to income, and occasionally either progressive or regressive. In contrast, the incidence of public expenditure is mostly progressive, so an increase in the levels of taxation and expenditure would tend to improve the distribution of welfare. Little direct evidence has been collected on the distribution of measures of well-being, such as human development indicators, but there is strong evidence that health achievements are related to income levels, while average societal health standards tend to worsen as inequality increases.

Most of the paper, along with much of the literature, is devoted to exploring the traditional concept of vertical income distribution The paper points to the importance of examining horizontal inequalities (or inequalities between groups divided on religious, ethnic, racial or other cultural grounds), since these are closely related to societal stability. In conclusion, all the analysis and evidence points to the desirability of achieving egalitarian income distribution for development. Yet current trends seem to be going in the opposite direction.

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INTRODUCTION

The distribution of income within a society is of enormous importance. It influences the cohesion of the society and, for any given level of GDP, determines its poverty level. Some relatively high-income economies have very unequal income distribution with the result that there are large cleavages in society and high levels of poverty, as in Brazil. Other countries with more equal income distribution have less poverty and there is a sense of fairness within the society which makes for political stability, as in Costa Rica. The sensitivity of poverty to growth depends on a country's income distribution; for example, a 1 per cent growth rate of GDP leads to a 0.21 per cent reduction in poverty in Zambia, if distribution is unchanged, compared with a 3.4 per cent reduction in Malaysia (Sen, 1995). There is also considerable evidence that the distribution of income has a significant influence on the rate of growth, with more equal societies growing faster than less equal ones. Moreover, the average health status of a society depends on its income distribution, to that countries with more unequal distributions experience lower life expectancy.[1] An equitable distribution of income, as well as the achievement of social goals, are, therefore, essential aspects of development, over and above economic growth.

This paper aims to explore the connections between income distribution and economic growth, and to identify some policy conclusions emerging from the analysis. There have been many investigations of the relationship between income distribution and development, starting with a classic paper by Kuznets, who argued that income distribution was generally relatively more equal at low levels of income in the early stages of development, became more unequal as development proceeded, and finally a reverse move took place so that income distribution became more equal again as countries approached the levels of incomes of the developed countries. The work of Kuznets, and others, identified correlations between levels and growth of per capita income and income distribution. Behind these correlations lie two possible types of causality: first, how growth affects the distribution of income; and secondly, how distribution affects growth. Both will be investigated, before exploring recent trends in income distribution.

The paper is organized as follows: section I considers some important definitional issues; section II reviews findings on the ways in which growth affects income distribution; section III looks at the reverse causality, i.e. how income distribution affects growth; section IV discusses growth strategies which are likely to generate more equal income distribution; section V reviews recent trends in income distribution; section VI explores wider dimensions of inequality extending beyond pre-tax private incomes, to encompass the incidence taxation and expenditure, and some indicators of inequalities in capabilities; section VII discusses horizontal (or group) inequalities; section VIII briefly reviews changes in global income distribution; and finally, section IX concludes.

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[1] The evidence is surveyed in Wilkinson, 1996.

I. SOME IMPORTANT DEFINITION ISSUES

Key issues concern distribution of what, among whom and within which unit.

(a) Distribution of what? In almost all discourse, the focus is on the distribution of current monetary (or private) income – normally pre-tax and subsidy but sometimes post-tax and subsidy. Even within the 'income' paradigm of welfare, one needs to extend this to include future income (e.g. by adding current asset distribution). But alternative approaches to well-being suggest the need for concern with one, other, or all of the following: the distribution of social income (i.e. goods and services provided by the State) as well as private income; distribution of capabilities or functioning; of basic needs goods and services; or of human development achievements.[2] A broader approach to distribution is needed, whether it is a matter of assessing distribution in a society from the perspective of well-being, or from that of investment (i.e. the impact of current distribution on growth). For example, inequality in access to education, which is acute in many societies, is a major influence on future household income, and may also affect the rate of growth, since in many occupations those deprived of education are unlikely to be as productive as the educated. Inequality in access to health services can be much more important than inequality in private incomes, since life itself may depend upon it. Nonetheless, most of the literature focuses on the distribution of private incomes.

In addition to household income distribution, there is the question of *functional* income distribution, i.e. the distribution between profits, wages, rents, etc. This indeed was the 'great' question of Ricardo on household distribution. Functional distribution is important because it is a major determinant of household distribution, as well as being a determinant of savings, accumulation, and growth. Yet it is virtually ignored in most current empirical, and much theoretical, work (see, for example, reviews by Kanbur and Lustig, 1999; Kanbur, 1998).

(b) Distribution among whom? The appropriate level of analysis depends on why the information is needed. If the aim is to assess well-being, and an individualistic approach to well-being is adopted – as with utilitarian and capability approaches – then the individual is the appropriate level. But much of the data is collected at a household level, as it is difficult to get information at the level of the individual. Frequently, household and individual information is used interchangeably, but there has been some effort to correct household data, in order to translate it into information about individuals, for example, by allowing for intra-household distribution (and sometimes correcting income to allow for the needs of people of different ages or genders within the household).

However, for some important aspects of well-being, the relevant distribution is that among *groups,* not individuals, such as distribution of income between groups of different ethnicities, religions, regions or races. We term this type of distribution *horizontal,* to differentiate it from the normal

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[2] There is, of course, a lot of overlap among these alternatives.

vertical measures of distribution among households or individuals. Horizontal distribution is one of the major causes of conflict between groups. It can also be directly relevant to individual well-being, where people identify strongly with the group to which they perceive themselves as belonging. For other purposes, such as for North-South negotiations, the appropriate measure of inequality may be average differences among nations.

(c) *Distribution within which unit?* Another issue is the *unit* within which inequality is assessed. Conventionally, this unit is the *nation*, the obvious rationale being that this is the major policy-making unit. But some policies are made at the local level, so that the local administrative unit would be the relevant one. For purposes of aid and other international policies, the global level is appropriate, and for intra-regional policies, distribution within the region.

In practice, almost all the literature relates to *private income distribution among individuals within a nation,* thereby excluding many important issues. Much of this paper will do likewise, but will return to some of the broader definitions at the end.

II. HOW GROWTH AFFECTS DISTRIBUTION

As noted earlier, in 1955 Kuznets famously propounded the view that there is an inverted "U" curve relating levels of per capita income to income distribution, with income distribution first becoming more unequal, and at a later state more equal, as per capita incomes rise. Kuznets derived this from cross-country evidence. Historical work on the changing income distribution in industrialized countries also provided supporting evidence (Paukert, 1973). But it should be noted that the Kuznets work relates to *levels* of income per capita, not to the *growth* rate. Moreover, further work on the Kuznets curve has found the relationship weak, as it is dependent on the precise functional form adopted (e.g. Anand and Kanbur, 1993a; Deininger and Squire, 1998). Bourguignon concludes: "If there is any parabolic relationship between income inequality and GDP per capita across countries... it is probably very weak and unstable over time... [and] longitudinal data ... seem to suggest that there is much freedom in the way distribution in a given country may change over time" (Bourguignon, 1995: 47). Deininger and Squire (1998) also find 'virtually no support' for the Kuznets hypothesis. However, there is no uniform agreement on this. Several investigations have found some support for the Kuznets hypothesis (e.g. Oswang, 1994; Ali, 1998; Milanovic, 1994; as well as Fishlow, 1995).

Despite its fragile empirical foundations – made even more so by the recent increase in inequality in developed countries – the Kuznets curve has been widely accepted, and sometimes used as an excuse, for taking no action on income distribution, on the assumption that the natural laws represented by Kuznets will unavoidably be realized. It may, of course, be that there are 'natural laws' leading to a Kuznets relationship in a laissez-faire development process, but these can be countered by policy which explains the many exceptions to the curve. It is in this spirit that it is worth briefly surveying the explanations that have been put forward for the Kuznets relationship:

(i) In the case of a dualistic economy, with a low productivity, more egalitarian agrarian sector, and a high productivity, less egalitarian industrial sector, development causes a sectoral shift to occur. Consequently, inequality rises, both because of the differences in average incomes between the sectors and because people are shifting from a less to a more egalitarian sector. But when the whole economy becomes part of the modern industrial sector, the inequality arising from the between-sector differences disappears, and when full employment is reached, income inequality within the modern sector also diminishes. This explanation, termed the Kuznets process, was developed into a formal model by Anand and Kanbur (1993b);

(ii) Another explanation, derived from the Lewis growth model, is that productivity and incomes growth is confined to the modern sector, where the profit share rises, while in the stagnant traditional sector incomes remain low (and may even fall as population growth occurs), so that between-sector inequality rises;

(iii) A third explanation attributes the process to an initially unequal distribution of assets, which contributes to rising inequality, as those with more assets also accumulate more; but, eventually, the rate of return to capital falls and the unequalizing effect of capital is offset by an equalizing effect arising from labour incomes.

Empirical work on growth (as against levels) of per capita income, however, shows *no* relationship between growth rates and inequality (Ahluwalia, 1976); and recent work confirms this (Bruno, Ravallion and Squire, 1995; UNCTAD, 1997). Histories of individual countries show that in some countries income distribution has worsened over time (e.g. Brazil) and in others it has improved (e.g. Indonesia in the 1970s). In fact we can observe countries in each of the four possible quadrants representing combinations of growth and changes in income distribution, as shown in table 1.

The conclusion, then, is that growth is ‘distribution neutral’, i.e. it does not necessarily lead to either a worsening or an improvement in income distribution, and may be consistent with either. Structural factors and policy stances determine countries’ experiences.

Table 1

Growth and distribution in different economies

	High growth	*Low growth*
Distribution worsening	Brazil (1960s to early 1990s); Pakistan (1970–1985); China (1980s); Thailand (1970s and 1980s); Botswana, 1970s	Post-Soviet Russia; most eastern European countries, 1980s; Mexico 1980s; Kenya 1980s; Ethiopia 1980s; Guatemala 1970s and 1980s
Distribution improving	Indonesia (1973–1993); Malaysia (1970–1990); Taiwan Province of China (1950–1980); Republic of Korea (1950–1980); Mauritius (1980s and 1990s)	Sri Lanka (1960–1970); Cuba; Colombia, 1980s; Morocco (1970–1984); Trinidad and Tobago (1970s and 1980s)

Source: Demery et al. (1995); Chu et al. (1999).

III. HOW INCOME DISTRIBUTION AFFECTS ECONOMIC GROWTH

In the 1950s it was assumed that more unequal income distribution led to higher growth, via higher savings – and possibly incentive effects (e.g. Galenson and Leibenstein, 1955).[3] Higher savings propensities associated with more unequal income distribution were variously attributed to the effect of a rising profit share (more, or only, savings out of profits, as assumed by Marx, Kaldor and Lewis), or of more unequal household income distribution (with a Keynesian consumption function). The early choice-of-technique literature (Dobb, 1956–57; Sen, 1968) argued that more capital-intensive techniques should be chosen to maximize surplus and reinvestible funds. From this, the view emerged that countries should grow first and redistribute later. This view was challenged, for example, by

3 Kaldor (1956) suggested that in a full-employment economy higher investment would lead to a higher profit share, so that growth and inequality would be likely to be associated, although the causation in this model ran from investment to profits/savings, not the other way round.

Adelman and Morris (1973), who argued that more equal initial income distribution would lead to higher growth.

Recent literature has supported Adelman and Morris; empirical work shows that countries with more equal income distribution have higher growth (Alesina and Perotti, 1993; Persson and Tabellini, 1994; and many others[4]). Owing to data constraints, most work involves cross-country regressions. There are especially severe data problems in the area of income distribution, as under-declaration of income is common for obvious reasons.[5] Here too the robustness of the findings has been questioned, notably by Fishlow (1995), who finds no statistically significant evidence of a relationship between growth and equality, when a dummy variable is introduced for Latin America. However, investigations over time in developed countries have confirmed the relationship between greater equality and higher growth (e.g. Panizza, 1999, who investigated growth performance in states in the United States from 1920). However, the very large number of studies finding some relationship gives some confidence in the existence of a positive relationship between equality and economic growth – and certainly refutes the prior and opposite conclusion.

A variety of mechanisms to explain the positive relationship between income distribution and economic growth have been suggested.

(a) One type of mechanism relates to the political economy of more or less equal societies, and how, as a result of political developments, high inequality translates into growth-impeding factors. For example:

   (i) It is argued that higher inequality leads to more political instability, more uncertainty, less investment and lower growth (Alesina and Perotti, 1994a; Bertola, 1993; Perotti, 1993; Persson and Tabellini, 1994);

   (ii) It is suggested that higher inequality leads to populist redistributive tax policies, more disincentive effects and lower growth (Alesina and Rodrik, 1994; Persson and Tabellini, 1994);

   (iii) Higher inequality gives a disproportionate influence to rich groups which lobby for preferential tax treatment, leading to over-investment in certain areas and reducing growth (Bruno, Ravallion and Squire, 1995).

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4 Including Alesina and Rodrik, 1994; Birdsall, Ross and Sabot, 1995; Bourguignon, 1995; Deininger and Squire, 1996; Sarel, 1997; Larrain and Vergara, 1997.

5 Deininger and Squire (1996) produced a ‘cleaned’ data set, excluding 1,200 out of 2,000 observations. But the cleaning process inevitably introduces its own biases; for example, more equal countries are likely to produce more reliable data on income distribution as particular groups have less reason to conceal their incomes.

(b) Other explanations relate to the economic effects of higher equality/inequality:

(i) Higher equality of land ownership leads to more labour input, and higher land productivity (e.g. Lipton, 1993). There is abundant evidence that more equal land distribution is associated with higher agricultural productivity as well as more equally distributed rural incomes, and in rural economies this accounts for a significant proportion of total incomes.

(ii) Higher equality reduces poverty, and leads to more human development (nutrition, education and health), with a more productive workforce, more innovation, etc. (Birdsall, Ross and Sabot, Stewart and Raffirez, 1995; Ranis, 2000).

(iii) Higher equality in asset distribution leads to a more even access to credit and information, and more opportunities for the poor to make productive investments (Galor and Zeria, 1993; Deininger and Squire, 1998).

(iv) Higher equality leads to larger domestic markets, greater exploitation of economies of scale and hence more industrialization and growth (Murphy, Shleifer and Vishny, 1989).

(v) Higher inequality, on the other hand, leads to higher fertility, since those who are poor and less educated have larger families, and this in turn reduces growth (Benabou, 1996; Khoo and Dennis, 1999; Bloom et al., 1998).

These are all hypotheses, none of which have been thoroughly tested. The political economy explanations mostly rest on an assumption about the behaviour of the ‘median voter’, which is not relevant in non-democratic societies. Moreover, the statistical evidence supporting the positive relationship between more equality and higher growth appears to apply to non-democratic countries, not democratic ones, according to Deininger and Squire (1998). In addition, the model assumes that more inequality leads to higher government spending, when in fact the reverse appears to be true (Benabou, 1996). The ‘human development’ explanation (i.e. that more equality leads to more education, better nutrition and health, and hence more productive people (see (v) above) is much better supported. There is considerable evidence that a more equal income distribution leads to a greater spread and level of education, as well as improved health and nutrition, and that this in turn brings about higher growth (Birdsall and Sabot, 1994; Ranis et al., 2000). However, this does not seem to be the whole story, as empirical work has found that greater equality has an independent positive impact on growth, in addition to the impact via education levels (Birdsall and Sabot, 1994; Bourguignon, 1995).

Whatever the mechanisms – still subject to investigation – there is broad agreement on the empirical evidence, which shows that more equality is associated with higher economic growth. Moreover, the order of magnitude of the effect is quite high. For example, Bourguignon estimates that a change of one standard deviation in inequality is responsible for half a percentage point of additional growth.

Taking the findings of sections II and III together would seem to point to the following fairly optimistic conclusion; namely, that more egalitarian income distribution is better for growth; and that cross-country evidence shows that growth neither increases nor decreases inequality in any systematic way. Since more equal income distribution is desirable as an intrinsic part of the development agenda, as a mechanism for reducing poverty and enhancing human development, *and* as instrumental to growth, the agenda should be to identify which *types* of growth are more likely to improve income distribution and which policies would help bring about egalitarian patterns of growth.

IV. EGALITARIAN PATTERNS OF GROWTH

The distribution of income is the outcome of complex economic processes. Individuals' incomes depend on their incomes from assets and from their own current activities. Income from assets is a function of asset ownership and the rate of return on assets; and income from current activities depends, similarly, on quantity of, and returns to, employment (or self-employment), the returns to employment normally being a function of the individual's level of education and skills. For an economy as a whole, income distribution then depends on asset distribution, distribution of human capital, and returns on each. It is thus not surprising that we observe a large range of income distribution across countries – contrast, for example, Brazil, where 48 per cent of the income goes to the top 10 per cent of the population, and just 0.8 per cent of total income goes to the bottom 10 per cent, with India, where 25 per cent of the income goes to the top 10 per cent of the population, and 4.1 per cent to the bottom 10 per cent. This way of looking at income distribution indicates one rather obvious point: a large part of any particular distribution is determined by factors inherited from the past – in particular, the stock and distribution of capital (monetary, physical and human). Hence, unless there is very radical action involving asset redistribution (as was taken in Taiwan; Province of China; and the Republic of Korea in the 1950s) or the destruction or flight of human capital (as in Cambodia), we should not expect large changes in income distribution in shortish periods of time.

Statistical investigation shows the importance of asset distribution. For example, education has been estimated to account for 10–20 per cent of observed inequality (Fishlow, 1995); Bourguignon and Morrisson estimate that inequality in land distribution accounts for 17 per cent of income inequality; they also show that the abundance of mineral resources in a country has to be associated with higher inequality (Bourguignon and Morrisson, 1990).

Aside from asset redistribution, changes in income distribution depend on changes in the amount and returns to current activities, that is to say, employment of different types of labour, and returns to that employment. The poor are invariably among those with low earnings. Some work for long hours but at very low rates of remuneration, and others have little or no employment. Some combination of low hours of work and low remuneration is normally found in the agriculture sector, in the informal urban economy, and among some unskilled jobs in the formal sector. From this perspective, growth strategies likely to improve the earnings of the poor, and hence improve income distribution, include those which raise returns to agriculture, increase the availability of unskilled work, and extend basic education.

This analysis and cross-country comparisons suggest the following factors are likely to lead to more egalitarian growth:

- Agrarian-focused strategies, especially those also favouring rural industrialization;
- Employment-intensive strategies (export-led, and/or supported by labour-intensive employment schemes);
- High levels of and widespread education;
- Asset redistribution. This is important, not only for the immediate impact on income from assets, but also because it influences the rest of the development strategy in a variety of ways; for example, more equality leads to more widely spread education, and it may, lead to mass markets for labour-intensive consumer goods rather than élite goods. The consequent political economy tends to favour more pro-poor economic decisions;
- Government policies towards structuring the market, so that education, training, and asset accumulation is directed towards deprived groups.

Examples of each of these approaches are presented briefly below:

(a) Agrarian-focused strategies

Considering that in the poorest countries a majority of the population works in agriculture, that the rural sector is typically poorer than the urban one, and that the percentage of the labour force in agriculture generally exceeds the share of agriculture in GDP, increasing the productivity of the rural sector should clearly promote more equitable growth. Indeed, Lipton saw 'urban bias' as the major source of poverty in developing countries (Lipton, 1977).

A wide range of strategies would tend to promote agrarian-focused growth. These include reducing macroeconomic biases against agriculture, which almost always arise as countries attempt to promote industrialization; introduce land reform; improve access to extension services, market information and input and output markets for smallholders; develop rural infrastructure; and promote agricultural diversification and the non-farm rural sector (e.g. through agro-processing, which has forward and backward linkages, and can employ those with little or no land).

One study estimated that in Pakistan, in the absence of government price interventions, farm incomes from the five major crops would have been 40 per cent higher over the 1983–1987 period

(Dorosh and Valdes, 1990). The effect of the price interventions for the five major crops translated into a transfer out of agriculture of 25 per cent of GDP in the 1978–1987 period. In contrast, Taiwan Province of China had relatively moderate macro-bias against agriculture, strong and egalitarian agricultural growth and high levels of rural industrialization (Burmeister et al., 1999).

Most countries that have done well in agriculture have taxed the sector moderately and provided strong support for it. For example, in Malaysia, in the 1970s, total commodity taxation was relatively low at 19 per cent of value of output, while government spending in direct support of agriculture was 10 per cent of the sector's value added. Malaysia had an agricultural growth rate of 5 per cent per year. By contrast, in the same decade, Ghana taxed agricultural commodities by over 60 per cent and spent only 3 per cent of value added on support – its farm output fell more than 1 per cent per year. Similarly, Latin America taxed agriculture much more heavily than East Asia (directly and via an overvalued exchange rate) and the growth in agricultural output and productivity was substantially lower (Schiff and Valdes, 1992).

Rural industrialization also tends to improve income distribution. This is more likely to be dynamic where agricultural output is rising fast, so that there are strong agriculture/non-agriculture linkages; such linkages can also be promoted by government support for rural infrastructure and credit, and are likely to be stronger where land distribution is more egalitarian (Ranis and Stewart, 1987). Decomposition of the factors accounting for the increase in equality in Taiwan Province of China over the 1960s has shown that an important element was rising household incomes from non-agricultural sources (Fei, Ranis and Kuo, 1979).

A study in Bangladesh showed the strong impact of investment in rural infrastructure on rural incomes. A comparison between villages which had benefited from greater provision of infrastructure compared with those that had not, found a one-third increase in average household incomes among the beneficiary villages. Crop income grew by 24 per cent, wage income by 92 per cent, and livestock/fishery income by 78 per cent, all benefiting the poor. Non-farm businesses increased by 17 per cent, which benefited both the non-poor and the poor via improved non-farm employment opportunities (World Bank, 1990).

(b) Employment-intensive strategies

Quite sharp differences can be observed in the employment-intensity of output increases. For example, the employment elasticity with respect to output growth was estimated at *plus* 0.5 in East and South-East Asia (1971–1992), compared with *minus* 0.5 in Latin America. Within Asia, it was higher in some places (+0.7 in Indonesia), and lower elsewhere (for the 1980s, +0.3 in India, negative in the

Philippines).[6] In general, more rapid growth in employment is likely to be associated with more egalitarian income distribution.

These differences are partly due to the output mix between and within sectors, and partly to choice of technique. Rapid expansion of labour-intensive exports – observed in many Asian countries – contributes to fast growth in employment. Policies which support this, and also favour more labour-intensive techniques (e.g. by not subsidizing capital and by securing more credit for small enterprises) promote employment-intensity (Stewart, 1987). Trade liberalization may increase labour-intensive exports in countries with abundant labour, but only if infrastructure is adequate and the labour has at least minimal education (Wood, 1994). In economies, where the dominant export is minerals or plantation agricultural crops, trade liberalization can worsen income distribution.

Employment schemes can also contribute – for example, the Maharashtra Employment Scheme, the very extensive employment schemes in Chile in the early 1980s, and in Bangladesh in the 1970s.

(c) Asset redistribution

A more egalitarian asset distribution not only contributes to more equality in income distribution directly, but also indirectly by increasing the employment intensity of output in both agriculture and non-agriculture, and strengthening domestic linkages (i.e. the demands that agriculture generates for non-agriculture; and the demands that the formal sector generates for the products of the informal sector (Ranis and Stewart, 1987, 1993, 1999)). More equal distribution of land also raises output – Deininger and Squire (1997) show that a difference of one standard deviation in the initial Gini coefficient for land is associated with income gains of 0.5 per cent for the population as a whole, with gains of 1 per cent for the poorest 20 per cent and 0.9 per cent for the poorest 40 per cent.

A comparison between Viet Nam and Bangladesh provides an illustration: in Viet Nam, land distribution is much more egalitarian and there is much less landlessness; Viet Nam has experienced an agricultural growth rate of 5 per cent per annum, compared with a rate of 2 per cent in Bangladesh over the past decade (Ahmed and Goletti, 1998).

Land reform has been very effective in some economies (e.g. Taiwan Province of China and the Republic of Korea, and also Egypt in the 1960s), but political obstacles are often severe. In quite a number of countries, even though reforms have been only partially implemented, substantial land redistribution has been achieved. (Powelson, 1984; Lipton, 1993). Moreover, even the more limited reforms generate some improvements in rural income distribution (El-Ghonemy, 1990; Besley and

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[6] Data from Khan and Muqtada, 1997.

Burgess, 1998). There is a strong case for making land reform a high priority in strategies to improve equity and growth.

With industrialization, land distribution is becoming of lesser aggregate significance, while the distribution of industrial and financial assets is of growing importance. The public ownership of such assets previously represented a way of moderating asset inequality, but this is no longer regarded as a policy option. In highly unequal societies, as in South Africa, more direct policies to tackle asset inequalities are needed. Wealth and inheritance taxation is one option.

The distribution of credit influences accumulation and the distribution of assets. In general, formal-sector credit tends to be biased against the low-income groups because of their lack of collateral, while informal sources are extremely expensive. Surveys of the informal sector generally report that less than one per cent have access to formal sector credit (see, for example, surveys quoted in IADB, 1999; Anderson, 1982; Stewart, Thomas and de Wilde, 1990). The self-employed and employees of micro-enterprises are generally among the lower-income groups; for example, in Latin America it is estimated these enterprises account for 30–40 per cent of low-income earners. New lending mechanisms, such as the group lending procedures of the Grameen Bank, can help to redirect credit to low-income groups.

(d) Education

According to Thompson (1998), "Considering the high payoff from investment in human capital, the unequal distribution of education opportunities is often a more important determinant of the skewed income distribution than is the skewed access to land". Higher (primary and secondary) school enrolment rates tend to be associated with lower inequality . On the basis of cross-country analysis, Bourguignon and Morrisson estimate that a one per cent increase in the share of the labour force having at least secondary education increases the share of income received by the bottom 40 per cent by 6 per cent, and that received by the bottom 60 per cent by 15 per cent (Bourguignon and Morrisson, 1990). One recent study (Behrman, 1993) finds that those with no schooling have a 56 per cent probability of being among the poorest 20 per cent, while those with university training have only a 4 per cent chance. In Brazil, an average 25-year-old in the top decile has an average of 11 years of education, while one in the bottom decile has just two years of education (IADB, 1999).

A study of Latin America in the 1980s found that about a quarter of the inequality among workers' incomes was due to differences in educational levels (Psacharopoulos et al., 1996). Education benefits the rural as well as the urban population – educated farmers are more likely to adopt new technologies and obtain higher returns on land (shown by studies in Malaysia, the Republic of Korea and Thailand.) Chou and Lau (1987) show that in Thailand one additional year of schooling adds about 2.5 per cent to farm output. Even in the informal sector, there seem to be high returns to education. Returns were estimated to be as high as 33 per cent for women self-employed in the retail textile sector in Peru, and 14 per cent for post-primary educated men in the service sector (World Bank, 1990).

Educational access and expenditure is often distributed very unevenly. Adult literacy varies from over 80 per cent in East Asia to as little as 13 per cent in Niger, and only 36 per cent in Pakistan. Zambia spent nearly a quarter of its educational budget on tertiary education, with an estimated enrolment rate of 2 per cent in 1980, while Bangladesh spent 8 per cent with an enrolment rate of 3 per cent, and the Republic of Korea also spent 8 per cent, but with a much greater enrolment rate of 48 per cent.

Increasing educational access improves both equity and efficiency, and can make other reforms more effective, such as those aimed at promoting agricultural growth or labour-intensive exports.

(e) Structuring the market

This describes a set of policies directed towards ensuring that particular deprived groups get favoured access to assets, including education, in a market economy. A range of policies can be used to this effect; for example, employment regulations that require enterprises to employ a certain proportion of a targeted group, such as those introduced as part of the Africanization policies of many newly independent African States. Restrictions can also be directed towards educational institutions (as in the positive discrimination policies in the United States), towards banks, in the distribution of government expenditure, and so on.

The Malaysian New Economic Policy is another example. In Malaysia in 1970, the majority population (the Malays or Bumiputra) were economically the most disadvantaged section of the population, with an average household income 40 per cent less than that of the ethnic Chinese income. A New Economic Policy (NEP) was introduced designed to improve the economic position of the Malays. Targets were defined: 95 per cent of new lands were to be settled on Malays; at least 30 per cent of the equity of all public companies was to be owned by Malays; educational quotas in public institutions were specified in line with population shares; credit policies favoured Malays, with credit allocations and more favourable interest rates.

The policy was a success from many perspectives. The employment share of Malays in manufacturing rose from 26 per cent to 41 per cent between 1967 and 1987, with their share in professional and technical employment rising from 47 per cent to 56 per cent; the share of ownership in public companies rose from 4.3 per cent in 1971 to 19.4 per cent in 1988; their university enrolment share rose from 12 per cent in 1969 to 61.8 per cent in 1988. The income gap between Malays and other groups was almost eliminated. The success of the structured market in Malaysia in meeting its own objectives (narrowing gaps between Malays and others) was achieved without undermining growth, while income distribution improved. Malaysia's growth rate over the period was one of the fastest in the world, at 6.3 per cent per annum during the period 1960–1989, while there was a marked improvement in income distribution, with the share of income of the bottom 40 per cent rising from 11 per cent in 1970 to 14 per cent in 1987, and the share of the top 10 per cent falling from 41 per cent to 35 per cent over the same period.

To some extent these strategies for achieving more egalitarian growth are complements, and to another extent, substitutes. Thus, extending education will make land reform more effective, but it can also contribute to greater equality in the absence of land reform. A structured market generally would improve income distribution so long as the groups targeted for improved access are relatively deprived, but it would probably also contribute to greater efficiency only if accompanied by supportive policies towards education and employment. The appropriate strategy partly depends on the initial conditions of the country concerned, including resource availability, distribution of assets and particular weaknesses. For example, in resource-rich areas, labour-intensive strategies may not be feasible, and therefore emphasis would need to be placed on investment in human resources, innovation and upgrading technology, so as to improve international competitiveness and generate jobs in the export sector. This is the strategy advocated for Latin America by ECLAC in its integrated approach towards improving social equity through changing production patterns (ECLAC, 1992). However, it seems unlikely that this strategy alone would markedly improve income distribution without also tackling the gross inequalities in assets prevalent in many countries in the region.

The political feasibility of the alternative approaches, their economic desirability, and their probable impact on income distribution and development are likely to vary according to the prevailing conditions, so any policy suggestions need to be country specific. From this perspective

Table 2

Policies adopted by economies combining growth and improved income distribution

Countries combining growth and improved income distribution	*Prime features of policy mix*	*Growth rate, GNP p. capita, 1975–1995*	*Gini coefficient, recent date*
Taiwan Province of China	Land reform; agricultural focus; rural industrialization; labour-intensive exports; education	6.7	0.29
Republic of Korea	Land reform; education; labour-intensive exports	7.0	0.35
Indonesia	Labour-intensive exports; agricultural growth	5.1	0.32
Malaysia	Structured market; education; labour-intensive exports	4.4	0.48
Mauritius	Education; labour-intensive exports	4.2	0.37

Source: UNDP, *Human Development Report 1999*; World Bank, *World Development Indicators 1997;* Chu et al. (1999).

it is instructive to go back to the set of countries (shown in the earlier matrix) that combined growth with improved income distribution, and identify the policy mix each adopted.

The adoption of the combinations of strategies shown in table 2 above explains why these countries succeeded in achieving egalitarian growth. But one needs also to analyse the underlying political economy to understand why the Governments of these countries chose to follow such strategies, while others did not. Our knowledge in this area is still rather limited, but a superficial analysis of the countries in question provides a few pointers: the Republic of Korea and Taiwan Province of China both undertook effective land reform to counter the perceived threats from the Democratic People’s Republic of Korea and mainland China respectively. For the same reason both were anxious to promote economic growth, and saw investment in human resources as their opportunity, since they lacked natural resources. Both were strongly influenced by the United States because of their history and geopolitical position, and were encouraged to switch from import-substitution to an outward orientation at an early stage. Malaysia's strategy was more home-grown. It was inspired by the political imperative of improving the relative position of the majority Malays, and of sustaining economic growth to compete with its close neighbour, Singapore. The Indonesian Government was also partly motivated by the desire to promote local entrepreneurs relative to the Chinese, and partly by the objective of cementing the very fissiparous country by spreading education and health services throughout the country. The Government of Mauritius believed it was imperative to replace its dominant export, sugar, which had poor prospects, and therefore promoted education and the immigration of textiles entrepreneurs from Hong Kong (China) and from elsewhere, in order to achieve this.

V. RECENT TRENDS IN INCOME DISTRIBUTION

Earlier sections have shown the desirability of more equal income distribution, and also suggested ways of achieving this by adopting particular growth strategies, which would be especially effective when combined with asset redistribution or structured markets. The political realism of these strategies is shown by the large number of examples where they (or elements of them) have been put into effect. But this rather optimistic conclusion is countered by recent trends in income distribution.

While the direction of changes has been mixed, in the majority of countries inequality rose in the 1980s and 1990s – among developed countries, inequality rose in 15 and fell in only one country during this period; among countries in transition, inequality rose sharply in every country; in Latin America it rose in 8 out of 13 countries, falling in just 3; and in Asia it rose in 7 out of 10 cases. Only in Africa, where the data are incomplete, did the falls in inequality match the rises (see table 3), and here it has been suggested that this may have been a matter of "levelling down" (e.g. in the Côte d'Ivoire, see UNCTAD, 1997). This rather uniform movement towards greater inequality is perfectly consistent with the finding that the rate of growth does not affect income distribution: the rises in inequality in recent years have affected high- and low-growth countries equally.

Table 3

Changing income distribution, 1980s to 1990s

	No. of countries with rising inequality	*No. of countries with falling inequality*	*No. of countries with no change in distribution*
OECD	15	1	2
Eastern Europe and CIS	11	0	0
Latin America	8	3	2
Asia	7	3	0
Africa	3	3	1

Source: UNDP, *Human Development Report 1999*; Stewart and Berry (1999); Morley (1995).

It is essential to explore *why* inequality has been rising, if we are to determine whether a pro-equality agenda is possible in the current world situation, and how. The context in which the rise in equality occurred was one of increased marketization, liberalization and globalization, and rapid information-intensive technological change, all of which affected most countries in the world in one way or another. It seems likely that each of these broad changes contributed to the rising inequality. Clearly, since we are dealing with a mass of heterogeneous countries, different specific reasons applied in different situations.

Deconstruction of the change in income distribution shows that the increased inequality was generally due, in part, to increased inequality in wage and salary earnings, and in part, to a rise in the profit share and a fall in the wage share, increasing the proportion of income arising from the ownership of assets, which is invariably distributed more unequally than work income. In the OECD countries, earnings inequality worsened in most countries (Gottschalk and Smeeding, 1997). This also occurred in most transition countries, but here the fall in wage share played a more important role (Cornia, 1996). A study of changing wage dispersion from the late 1970s to the late 1980s showed a rise in the majority of developing countries, in eight out of nine countries in Latin America, three out of five in Africa and six out of ten in Asia (van der Hoeven, 1999; see also Berry, 1997; Robbins, 1995, 1996; and Làchler, 1997).

The following specific reasons have been suggested to explain rising inequality:

(a) Freer international trade – Following the Stolper-Samuelson theorem, one might expect inequality to *decrease* with trade liberalization in labour-surplus developing economies, as employment and the share of wages rise because of the expansion of exports of labour-intensive manufactures. Indeed, this seems to have been a characteristic of the countries that combined growth with improved equity over the longer period, as just noted. In resource-rich areas, however, tradeables are not labour intensive; moreover, in import-substituting economies, import liberalization can undermine the wage-earning class (Taylor and Krugman, 1978; Berry, 1997; Roemer and Guherty 1997). For example, studies in Chile and Mexico found that openness increased the wage gap between skilled and unskilled labour (Beyer, Rojas and Vergara, 1999; Ghiara, 1999). In some primary producing areas (African economies largely), trade liberalization may reduce the income share of urban workers and may raise incomes of peasant farmers, who generally have lower incomes than urban workers. But rising differentiation within rural areas can offset this income-equalizing effect.

A number of studies have shown that trade liberalization has not benefited unskilled labour in developing countries in any straightforward way (Davis, 1996). Earnings dispersion has tended to increase with more trade liberalization; empirical work has shown that land- and capital-intensive countries have a less equal income distribution, while skill-intensive countries have more equal income distribution (Wood, 1995; Freeman and Katz, eds. 1995; Spilimbergo, Londono and Székely, 1999).

Freer international trade might be expected to worsen income distribution in labour-scarce countries (i.e. the developed countries), where production of labour-intensive goods is undermined by competition from cheap labour in developing countries. This does seem to explain some of the deterioration in income distribution in developed countries, but the extent is open to debate; for example, Wood (1994) attributes one third to one half of the deterioration to this, and others, such as Leamer (1995), point to technology change as a major factor.

(b) Technology change – The rapid pace of technology change has raised the demand for skilled labour leading to rising income differentials among workers in both developed and developing countries (Leamer, 1995; Láchler, 1997; Robbins, 1995,1996; Berman, Bound and Machin, 1997). The effect is likely to be particularly acute in developed countries which specialize in technology-intensive goods and services. But it seems also to be affecting intermediate stage economies which have moved on from unskilled labour-intensive products (e.g. Mexico; Taiwan Province of China).

(c) The abolition or erosion of the minimum wage – This also seems to be an element increasing inequality in some countries. The question of the impact of minimum wages on income distribution and poverty is a controversial one: neo-classical theory suggests a rise in the minimum wage should reduce employment, and this could offset the impact of any rise on poverty. But Keynesian (and other) accounts of the determination of employment challenge this conclusion. A study of changes in inequality in Latin America in the 1980s found that the real minimum wage fell in almost every case where inequality worsened and rose in the three cases where inequality lessened. They concluded that “real

minimum wages may have an equalizing effect on the income distribution" (World Bank, 1993: 26).[7] The rise in wage inequality in the United States has also largely been explained by the decrease in the minimum wage (Teulings,1998; DiNardo, Fortin and Lemieux, 1996). Lustig and McCleod (1996) find that higher minimum wages are associated with lower poverty in developing countries, though they also lead to higher unemployment. Some evidence suggests a negative impact on employment (e.g. Neumark and Wascher, 1991; Rama, 1996; Abowd, Kramarz and Margokis, 1999); some suggest a switch from the formal sector to informal employment (Jones, 1998); while yet other studies show that a rise in minimum wages is associated with no change or even a *rise* in employment (e.g. Card, Katz and Krueger, 1994; Dickens et al., 1994; Card and Krueger, 1994). While, evidently, many firms disobey minimum wage regulations – especially in developing countries – in general, the coincidence of eroding minimum wages with worsening wage dispersion in numerous countries supports the view that minimum wages can improve income distribution. However, clearly the level of the minimum wage needs to be calculated carefully in line with the economic conditions of the country.[8]

(d) *Transition from communism to capitalism* – Rising inequality in Eastern Europe and the former Soviet Union has been "one of the biggest and fastest increases ever recorded", according to Milonavic (1998), with an average increase in the Gini coefficient of between 0.25 and 0.28 to between 0.35 and 0.38 in less than 10 years. This is explained by a peeling away of the factors which previously assured a high degree of equality, including privatization of assets, reduced restrictions on earnings differentials and a rising share of income from self-employment (including the black market) (Milanovic, 1998; Cornia, 1996).

(e) *Changing functional income distribution* – The functional income distribution (i.e. the shares of factors of production) is an important determinant of household distribution, since household incomes depend on the returns on the various assets they possess (including their labour), as well as their quantity. Since the upper income groups own most financial and physical assets, they are likely to gain relatively when the share of profits rises and the share of wage-income falls. For example, in Brazil – an extreme example of an unequal society – the lowest decile of households receives 0.8 per cent of non-labour income, compared with 47.2 per cent for the top decile (IADB, 1999). The rather limited evidence suggests that the share of wages fell, and that of profits rose, in the majority of countries over this period. In developed countries, the profit share in manufacturing rose in 10 out of 12 countries from

[7] This is also supported by a careful marshalling of evidence by Morley (one of the authors of a World Bank report, see 1993), whose conclusion is slightly stronger than that of the World Bank: "real minimum wages appear to have an equalising effect on the distribution" (Morley, 1995: 162).

[8] A preliminary evaluation by the Confederation of British Industry, the main employers' organization, reports that the minimum wage introduced into Britain in April 1999 had not had adverse effects on employment in the first five months, nor increased average earnings; it had had some effect in reducing wage differentials, and had led to modernization of work practices (upgrading skills) in some companies (*Financial Times*, 1/11/99).

1979 to 1989, the exceptions being Norway and Japan, and the biggest rises in profits took place in Australia, Belgium, Sweden and the United Kingdom (Glyn, 1992). Comparisons between the periods 1985–1992 and 1975–1980 show that among developing countries the share of wages in manufacturing fell in five Latin American countries and rose in three (comparing 1985–1992 with 1975–1980), with the biggest falls being in Mexico, Colombia and Venezuela; among Asian economies, it fell in four and rose in six, with big falls in Pakistan and Sri Lanka; and in Africa and the Mediterranean it fell in seven and rose in one, with the largest falls in Ghana and Turkey (UNCTAD, 1997). There was thus a broad coincidence between changes in the functional distribution and changes in the household income distribution, suggesting that the former is partly responsible for the latter. One then needs to explain why the functional distribution has changed in this way. It is not possible to do this here in any depth, but the process of globalization and liberalization, and possibly the new technologies creating Schumpeterian profits, seem likely factors.

(f) *Globalization in general* can be expected to increase returns to capital, especially in the context of a rapid reduction in restrictions on capital movements, while restrictions on the movements of unskilled labour are maintained. In developed countries, capital-intensive processes gain through trade specialization, and capital-owners gain by their ability to export capital; in capital-importing countries, liberalization alone should decrease returns to capital, as the ‘supply’ of capital rises relative to labour, but this may be offset by privatization, reduced regulation, etc., all of which tend to raise the gross returns to capital, as well as changes in the tax system favouring capital, which tend to raise the net returns. Globalization has decreased the bargaining power of labour and increased the power of capital, because capital (and goods) can move around the world relatively freely, while there are severe restrictions on the movement of labour, especially unskilled labour. Consequently, labour is discouraged from bargaining in case it frightens off capital and thus reduces employment. This may explain why there has been a worldwide decline in Trade Union membership (van der Hoeven, 1999).

VI. WIDENING THE DIMENSIONS OF INEQUALITY: IMPLICATIONS

At the beginning of the paper we pointed to the need to consider a broader set of indicators than simply pre-tax private household income, to which most of the previous discussion was related. A first requirement is to look at intra-household income distribution; secondly, post-tax income distribution; thirdly, the impact of state transfers (pensions etc.); fourthly, to include social income (i.e. publicly provided goods, services), which is an extremely important component of human well-being; and, fifthly, it would be desirable to examine the distribution of more direct measures of well-being, such as health, nutrition, and even happiness. This paper does not go far in these directions, but points to some ways in which extending the indicators may alter the conclusions.

(a) Intra-household income distribution

Uneven distribution of income within the household (by gender, age) greatly increases overall inequality among individuals; however, because the needs of people of different gender and age differ, it is difficult to determine what an equal distribution would look like. For example, one study suggests that allowing for intra-household income distribution increases inequality by 30–40 per cent (Haddad and Kanbur, 1990). Policies to counter inequality should include policies directed at correcting household inequality, for example, by improving female educational and earning opportunities.

(b) Post-tax income distribution

Numerous studies of the progressivity, or otherwise, of tax systems have come to differing conclusions, partly due to differences in methodology. On balance, there appears to be mild progressiveness in the tax systems, with very few cases in which post-tax income distribution is more unequal than pre-tax. For example, Shah and Whalley (1990 and 1991), surveying seven tax incidence studies in developing countries, showed that mostly the tax systems were mildly progressive. A more recent survey of studies in developing countries found that 13 out of 36 cases were progressive, seven proportional and seven regressive, with income tax being almost invariably progressive (Chu, Davoodi and Gupta, 1999). But it seems that on balance the progressiveness of tax systems has been falling, with a declining proportion of income tax (Chu, Davoodi and Gupta, 1999; Atkinson, 1999). Tanzi (1995) notes a general decline in rates of individual and corporation income tax. However, some developing countries – including Jamaica, Turkey and Indonesia – managed to reduce inequality significantly through the tax system (Chu, Davoodi and Gupta, 1999).

(c) State transfers

These include pensions and other state benefits, such as unemployment or disability benefits, which, in principle, can be substantial. Transfers are large and generally redistributive in many developed countries. But they are typically small, with less clear distributional implications, in developing countries because benefits are often largely confined to the relatively privileged formal sector workers. In Latin America such systems have been shown to be regressive in some cases (Mesa-Largo, 1983). However, when appropriately designed they can be highly redistributive (e.g. means-tested widows' pensions and disability pensions introduced in Tamil Nadu (see Guhan, 1992; Dreze and Chen, 1995; Dréze and Sen, 1991).

(d) Social income

Most government expenditure is progressive compared with pre-tax incomes.[9] Despite the fact that a substantial proportion of benefits from social expenditure invariably goes to upper-income groups, expenditure on health and education is almost always progressive (i.e. more equally distributed than pre-tax incomes): 31 out of 55 studies show that government education expenditure is progressive, and 30 out of 38 studies show health expenditure is progressive. But there is considerable diversity among countries. For example, in Guinea the bottom fifth of households receives 5 per cent of school expenditure and the top fifth receives 44 per cent, while in Costa Rica, the bottom fifth receives 18 per cent and the top fifth 20 per cent; the poorest fifth of the population receives 4 per cent of total health expenditures in Guinea, compared with 30 per cent in Costa Rica (Castro-Leal et al., quoted in Mehrotra et al., 1999). As is well known, expenditure on primary education is most progressive and expenditure on tertiary education is often regressive. For the most part, the limited evidence shows some improvement in the progressivity of the distribution of public expenditure over time.

Taking the evidence on tax and government expenditure incidence together, since taxation is normally either progressive or neutral and expenditure is normally progressive, we can conclude that higher taxation and expenditure can generally be expected to improve the distribution of welfare. This is an important conclusion and counters the widespread image that elites monopolize government expenditures, and that, therefore, less government taxation and expenditure is more progressive than more. It follows that downward pressure on government taxation and expenditure – associated with globalization and the liberalizing agenda – is likely to worsen post-tax, post-benefit income distribution.[10]

(e) The distribution of non-monetary indicators of well-being

Although there has been considerable progress in widening the definition and measure of progress beyond monetary income at a national level, notably with the UNDP Human Development Index, much less attention has been paid to the *distribution* of non-monetary aspects of well-being. Piecemeal evidence shows considerable inequalities in health and education. For example, the poorest electoral wards in northern England had death rates four times as high as the richest ones, while a study

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9 However, government expenditure is often not 'well-targeted', when this is defined as occurring where the poor receive a higher proportion of benefits than their share of population (Chu, Davoodi and Gupta, 1999).

10 Grunberg (1998) explores the forces that reduce revenue as a result of globalization – including the reduction in trade taxes; financial liberalization, the globalization of income; tax competition, leading to a general fall in tax rates on individuals and companies; and the growth of the (untaxed) informal economy. Her aggregate evidence for the 1980s shows a small fall in the proportion of national income going to Government in developing countries, but a quite significant rise in developed countries.

of civil servants in the United Kingdom found that death rates were three times as high among the lowest grades compared with the highest grades (Wilkinson, 1996). In the United States, age-adjusted mortality rates were found to be over 80 per 10,000 in the bottom decile of the white male population, compared with under 40 in the top decile (Davey Smith, Neaton and Stamler, 1996). In Brazil, infant mortality rates range from 90 per 1,000 to 12 per 1,000 in different areas of the same city. Similar differences are found for schooling, with, for example, nearly 60 per cent of the bottom quintile never having attended school in Nepal, compared with 13 per cent of the top quintile. In Brazil all the top 30 per cent of the income distribution have attended school, while a fifth of the bottom 10 per cent have never attended school. Although the extent of inequalities in non-monetary indicators tends to be smaller than monetary income dispersion, their importance for well-being, as well as a precondition of improving future incomes, is likely to be greater.

There is strong two-way causation between the distribution of monetary income and the distribution of human development achievements. Societies with more unequal income distribution have higher death rates than those with similar incomes and more equal distribution. Indeed, among developed countries it is the equality of income distribution, not income levels, which are associated with longevity (Wilkinson, 1996). A positive relationship between income equality and longevity has also been found in developing countries (Flegg, 1982). Indeed, some research shows that infant mortality rates increase with rising incomes if the level of income among the lowest fifth of the population is kept constant (Waldmann, 1992). *Inequality* as such worsens health. Conversely, more inequality in health and education is likely to lead to more unequal income distribution in monetary incomes.

VII. HORIZONTAL INEQUALITY: THE NEGLECTED DIMENSION

So far we have considered only *vertical* inequality, i.e. the inequality among individuals or households in a society. *Horizontal inequality,* or inequality among groups is also of huge importance to societal well-being. Groups may be defined culturally and/or geographically, e.g. by ethnicity, race, religion, or location. The extent of inequality among such groups is a key determinant of social cohesion. There are many relevant aspects of such inequality, including inequality in income, assets, employment, access to social income and resources.

Horizontal inequalities are a major factor contributing to social instability and ultimately civil war. A graphic example was the Rwanda situation, where the Belgian colonialists had divided Tutsi and Hutu and given them unequal access to most types of resources. Similar horizontal inequalities are to be found in many other conflict-prone places, such as between Protestants and Catholics in Northern Ireland, Tamils and Singhalese in Sri Lanka and Muslims and Christians in Serbia. Horizontal inequalities are more likely to lead to conflict where they occur systematically along a number of dimensions, and where they are growing (see Stewart, forthcoming, 2000). For economies vulnerable to conflict (which includes most low-income economies), monitoring and addressing horizontal inequalities is essential to prevent violent group conflict. Yet in practice, horizontal inequality is rarely identified or measured systematically. It should be noted that there can be a high degree of vertical inequality without substantial horizontal inequality if within a group inequality is high; however, generally, if a society has high horizontal inequality, vertical inequality is likely to be substantial. Given the heavy human costs of conflict, as well as the economic costs, tackling horizontal inequalities may be at least as important as reducing vertical inequality.

VIII. GLOBAL INCOME DISTRIBUTION

So far we have focused entirely on income distribution within countries, which is of interest to national policy makers, and which determines the cohesion of a particular society. Global income distribution is of relevance to international policy makers concerned with matters such as aid distribution, the terms of trade and debt relief. As other papers in this Round Table focus on this area (for example, see Maizels and Nayyar), here we review developments briefly for the sake of getting a more complete picture.

World income distribution is substantially more unequal than that of particular countries, since it encompasses the big differences in income between countries as well as within them. According to an UNCTAD estimate, the top 20 per cent of the world population received 83 per cent of world income in 1990, and the world Gini coefficient was 0.74 (UNCTAD, 1997). Trends in the distribution of world income depend on the evolution of both inter-country income differences (i.e. between-country inequality) and the distribution of income within countries. Most analyses suggest that inter-country income differences are the main contributor to the inequality which exists among the people of the world (Berry et al., 1991), while changes in world distribution are likely to be much more influenced by changes in inter-country income gaps than changes in intra-country inequality, because the former are so large and because they appear to change more quickly than do the intra-country gaps.

Berry, Bourguignon and Morrisson concluded that there was little change in the standard indicators of income inequality over the period 1950–1977. An important aspect of the evolution of world distribution over this period was the fast growth of the largest low-income country, China. Estimates of distribution of income within the non-socialist world showed increases in inequality, with the bottom deciles losing together with the middle ones. In the period 1980 to date, the evidence suggests worsening world inequality with inter-country differences increasing. According to UNDP (1999), while 33 countries had growth rates in GNP per capita of over 3 per cent per annum for 1980–1997, 59 countries had negative growth. For the decade of the 1980s, UNCTAD estimates that the world Gini coefficient rose from 0.68 in 1980 to 0.74 in 1990. This in fact underestimates the level and change in inequality because it includes only changes in distribution between countries, and does not include estimates of the increasing within-country inequality, documented above.

Thus the impact of globalization seems to have been unequalizing between nations as well as within them. To some extent other influences were also responsible, such as the increase in the technology-intensity of production, and the rise in the rate of return to capital. Yet other influences, such as worsening commodity terms of trade, were more relevant to explaining rising inter-country inequalities than intra-country.

IX. CONCLUSIONS

There is broad empirical and theoretical support for the view that greater equality of income distribution is good for economic growth, for social cohesion, for poverty elimination and for health; in other words, that *in general, more equality promotes development*. It seems, therefore, that greater equality of income distribution is to be recommended on all counts. Yet the current situation is one of rising inequality in the majority of countries, both among developed and developing countries, which associated with globalization and liberalization.

The evidence also suggests that Governments can influence income distribution by their policies towards asset distribution, by the growth strategy chosen and by tax and expenditure policies. In general, higher levels of taxation and expenditure improve the distribution compared with the pre-tax system, even where the tax system is not notably progressive. Well designed, tax, expenditure and transfer policies can greatly improve the distribution of welfare. Within limits, also, empirical evidence suggests that higher taxes do not impede economic growth. Yet globalization is restricting Governments' ability to counter the rise in inequality of primary monetary incomes by redistributive taxation and expenditure because of the feared impact on competitiveness, trade and capital movements. There is a sad irony in the situation because the rise in inequality and downward pressure on government expenditure is likely to reduce political stability, and also diminish essential expenditure on social and economic infrastructure, essential for sustained growth and social stability. A major policy challenge for the twenty-first century will be to tackle this dilemma.

One general conclusion from this is that coordinated regional, or better international, action would help promote equality without weakening the ability to compete. For example, regional coordination of domestic tax and benefit strategies would permit improved distribution without undermining competitiveness, as would regional coordination of minimum wages at an appropriate level. At an international level, coordinated taxation of international capital flows (including taxation of short-term capital and of multinational companies) and support for universal human rights to minimal standards of living would also contribute to improving income distribution, and countering the immiserizing impact which globalization can have. A global economic environment requires a global social response. In general, the liberalizing and globalizing era of the late twentieth century has tilted the balance of power and benefits towards those with capital (physical, human and financial) against those without. This needs to be corrected.

However, while a regional and global response is needed, much can be done at the national level. Countries which have put human development and improved income distribution high on the agenda, have not lost out in the global economy because the build up of human resources enhances their productivity. The types of policies likely to improve income distribution were identified above. They include agrarian-focused and employment-intensive growth strategies; high and widely spread expenditure on education; redistribution of assets; a structured market to direct education, training, and asset accumulation towards deprived groups; and strong policies towards social protection and social income. Gender balance in each aspect is necessary to improve intra-household income distribution. It is essential to consider not just vertical income distribution but intra-household and horizontal inequalities as well.

Nonetheless, although it is fairly easy to identify the appropriate set of policies which would increase equality and improve social cohesion and economic growth, the prevalence of powerful global forces responsible for the general rise in inequality makes it difficult to be optimistic about the possibilities of countries switching to a more egalitarian pattern of development.

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