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Keywords

development, poverty, income distribution, income inequality

Disciplines

Growth and Development | Income Distribution | International and Comparative Labor Relations | Labor Economics

Comments

Required Publisher Statement

© Elsevier. Final version published as: Fields, G. S. (1981). Poverty, inequality, and development: A distributional approach. *Journal of Policy Modeling*, 3(2), 295-316.

doi: 10.1016/0161-8938(81)90013-2

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Suggested Citation

Fields, G. S. (1981). *Poverty, inequality, and development: A distributional approach*[Electronic version].

Retrieved [insert date], from Cornell University, ILR School site: <http://digitalcommons.ilr.cornell.edu/articles/1140>

Poverty, Inequality, and Development:
A Distributional Approach

Gary S. Fields
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Journal of Policy Modeling (1981), 3(3), 295-315

Abstract

Economists have concentrated on aggregate economic growth to measure countries' development progress and in recent years have also considered income distribution performance. This paper reverses the conventional emphasis by placing income distribution at the forefront. I examine what is known about the distributions of income and poverty in the developing countries of the world and probe the correlations between poverty, inequality, and development. I explore the main sources of inequality and the extent to which individual countries have managed to alleviate poverty and reduce inequality in the course of economic growth. Employing evidence from case studies of six developing nations, I suggest some explanations for differing patterns of development and call for development planning founded on a firm commitment to helping the poor.

1. INTRODUCTION

The central question addressed here is the following: *Who benefits how much from economic development and why?* Among the subsidiary questions to be examined are these: What is known about the distributions of income and poverty in the poor countries of the world? What are the correlates of the observed patterns? What are the main sources of inequality? What indices should be used to measure the participation of the poor in economic development? What is the welfare economic basis for this choice? To what extent have individual countries alleviated their poverty and reduced their inequality in the course of economic growth?

The research strategy followed here differs from the conventional approach. Usually, economists focus on growth but weigh the growth performance by the distributional record. Most of the profession would rank development as follows (ordered from best to worst):

1. Rapid growth, good distributional performance.
2. Rapid growth, poor distributional performance.
3. Slow growth, good distributional performance.
4. Slow growth, poor distributional performance.
5. Nongrowth.

Another approach is followed in this paper. Rather than regarding GNP growth as the principal *outcome* of a country's development performance, I look upon the growth rate of GNP as an important *determinant* of changing poverty and inequality. I set aside for now the traditional question—Does the type of distributional pattern found in a country promote or hinder growth?—and ask instead: Do the rate and type of growth promote or hinder distributional goals? What explains different countries' performances?

What follows is a necessarily brief examination of these issues for those less developed countries (LDCs) for which data are available. Arguments and evidence outlined here are developed at greater length in Fields (1980).

2. MEASURING WHO BENEFITS FROM ECONOMIC DEVELOPMENT

The task confronting those who study the microeconomics of development is to process individual or family level data on income (or consumption or basic human needs) in ways appropriate to the economic problem at hand (which, to repeat, is: who benefits how much from economic growth?). Different kinds of approaches to measuring who benefits appear in the literature. Table 1 presents examples of each. My point in this section is to show that the approach chosen does *make* a very real difference.

In studies of distribution and development, it is customary to present data on growth of national income and change in relative income inequality.¹ The authors of these studies treat *social welfare* as depending positively on the *level* of national income and negatively on the *inequality* in the distribution of that income (measuring inequality, for example, by the Gini coefficient or equality by the income share received by the poorest 40% of income recipients). A falling share received by the poorest or a rising Gini coefficient is termed by these authors a “worsening of the income distribution,” and it is generally thought to be bad when rising inequality is encountered.

¹ Examples are Kuznets (1955, 1963), Weisskoff (1970), Fishlow (1972), Adelman and Morris (1973), Chenery et al. (1974), Berry and Urrutia (1976), Adelman and Robinson (1973), and Fei, Ranis, and Kuo (1979)

Example 1 in Table 1 illustrates how the judgments of the preceding paragraph are brought to bear in practice. Country B grew twice as fast as country A. However, relative income inequality, as measured by the Gini coefficient and income share of the lowest 40%, seems to be “worse” in country B than in country A; that is, it would appear that the rich benefited at the expense of the poor, whose relative income share deteriorated. A development economist might question whether the higher rate of growth in country B was “worth it” in terms of income distribution, and a well-meaning development planner seeking to give very high weight to alleviation of inequality might go so far as to choose country A’s policies over country B’s.

Insert Table 1

Data on distribution and development may be presented in other ways. Consider now another numerical example for two hypothetical countries at an earlier and a later stage of economic development. Suppose the “poor” are those who work in low wage jobs, while the “nonpoor” work at higher wages. A widely accepted social welfare judgment² is that welfare is higher when a smaller proportion of the population is poor. Take the income data in Example 2, assuming all income comes from labor and everybody is employed at one wage or the other. In both countries, the poor received the benefits of growth, but in country D twice as many poor benefited. Other things being equal, development economists would almost certainly rate country D as superior, and development planners would seek to determine the causes of that country’s

² Indeed, it’s the *raison d’être* for the field of development economics and is used by nearly everyone in the field.

favorable experience and adopt those policies in their own countries. In this second example, the preference is clearcut, whereas in the previous example, the issue was open to doubt.

Yet another kind of approach is found in the literature.³ This approach measures the average absolute income (in constant dollars) received by a predetermined share of the population, e.g., the poorest 40%. The average income of the poorest 40% is taken as a measure of the poverty status of the population. Users of this approach regard social welfare as higher when poverty is less by this measure, i.e., when the average absolute income of the poorest 40% rises.

Consider now Example 3. It appears that there was *no* improvement in absolute income of the poorest 40% in either case. One might ask: why grow if the poor do not share in the benefits of growth? In this third example, E and F both seem to have failed to alleviate poverty.

In point of fact, *countries A, C, and E are the same country, countries B, D, and F the same country!*⁴ Real-world economic development histories and policy projections are often presented in these different ways. Yet, as comparisons of these data make clear, how we do it matters.

The income distribution measures used in the three sets of calculations are representative of more general classes. They are as follows:

Example 1. *Relative inequality approach*, which looks at various groups' income changes relative to others'.

³ Examples are Ahluwalia and Chenery (1974) and Chiswick (1976).

⁴ The respective income distributions, assuming ten income recipients in each are as follows:

Initially in both countries: (1,1,1,1,1,1,1,1,1,2)

Later in A-C-E: (1,1,1,1,1,1,1,1,2,2)

Later in B-D-F: (1,1,1,1,1,1,1,2,2,2)

The figure \$40 in Example 3 assumes a 40 hour work week at \$1/hour.

Example 2. *Absolute income approach*, which looks at changes in various groups' incomes. A special case of the absolute income approach is:

Example 2. *Absolute poverty approach*, which looks at the proportion poor and the incomes received by those who remain poor.

Example 3. *Relative poverty approach*, which looks at changes in the absolute income of a fixed percentage at the bottom of the distribution.

To summarize the hypothetical "facts" of the example:

Indicator of Economic Performance	Change in Indicator
Growth	Higher in B-D-F than in A-C-E
Number of Workers in High Wage Employment	Higher in both than initially, faster rise in B-D-F
Absolute Income Among High Wage Workers	Unchanged in both cases
Absolute Income Among Low Wage Workers	Unchanged in both cases
Absolute Poverty	Lower in both than initially, greater reduction in B-D-F
Relative Inequality	Higher in both than initially, higher in B-D-F
Relative Poverty	No apparent change in either case

Weighing these facts according to the various income distribution approaches, we come to the following conclusions. By the *absolute income* and *absolute poverty* criteria, B-D-F clearly is preferable to A-C- E. Using the *relative inequality* criterion, it is difficult to judge: Although B-D-F grew faster than A-C-E, inequality seems to have worsened.⁵ Finally by the *relative poverty* criterion, both appear equally unsatisfactory, since neither country seems to have

⁵ Whether inequality really worsened, even in relative terms, is not entirely obvious when one looks at the figures as presented in Example Two.

made progress in alleviating poverty; in fact, poverty was being alleviated in both and at different rates.⁶

The point I come to is this: *How income distribution is studied*— whether in terms of relative income inequality, absolute income and absolute poverty, or relative poverty—*may lead to fundamentally different judgments about the success or failure of economic growth—even to questioning whether there was any development at all.*

The discrepancies among the various approaches are based in part on legitimate differences in value judgments as to what aspects of less developed countries' income distributions are worrisome, in part on a statistical pattern which in some respects is artefactual. Section 3 offers a welfare economic analysis of these issues.

3. WELFARE ECONOMIC ANALYSIS

Section 2 raised three important questions, which this section seeks to clarify:

1. In assessing the distributional consequences of growth, welfare judgments are inevitable. Do we wish to give greater weight in our judgments to the alleviation of absolute poverty or to the narrowing of relative income inequality?
2. What is it about the process of economic development that causes the various approaches to differ in the example?
3. How suited are the various approaches to the alternative kinds of development?

⁶ Note that the difficulties with the relative poverty measure arise in cross sectional data, where we look at those who are the poorest 40% *ex post* at different times. If we had longitudinal data, and were able to trace the progress of those individuals who were the poorest 40% *ex ante*, the problem would not arise. This is because their average income would be higher the faster the rate of growth of higher-paying employment. Unfortunately to my knowledge, longitudinal data are not available for a representative sample of the population in any less developed country.

The first question poses the choice between absolute and relative income measures in determining the beneficiaries of growth. The choice depends on basic ethical considerations that must be confronted.

For me, as for many other observers, the plight of the poor in less developed countries is *objective*, to the extent that they do not have command over sufficient resources to feed and clothe themselves and avoid disease. In this way of thinking, poverty is an *absolute* condition requiring analysis in absolute terms. Predominant emphasis in this approach is given to data on changes in the number of poor, the average extent of their poverty, and possibly to the degree of income inequality among them.⁷

Others have different concerns and make different judgments. They give great weight to the *subjective* feelings of the poor who may *feel* relatively worse off if others' economic positions are improving and theirs are not. Observers who feel strongly about such relative income considerations are justified in using relative inequality measures.

What is not justified, and there are many examples of this in the development literature, is the coupling of a concern over the *absolute* economic misery of the poor with reliance on calculations of changes in *relative* inequality over time. I fear this approach may be mistaken and misleading, quite apart from its logical inconsistency. For just as in the numerical example above, by assigning heavy weight to changes in the usual indices of relative income inequality and interpreting these increases as offsets to the economic well-being brought about by growth, important tendencies toward the alleviation of absolute poverty may be overlooked.

The second question raised at the beginning of this section addresses the nature of economic development itself. The example of Section 2 illustrated a particular kind of growth,

⁷ For more on this, see Sen (1976).

the main feature of which is its unevenness. If, in keeping with the dualism tradition in the development field, we regard the economy as consisting of an advanced “modern” sector and a backward “traditional” sector, the pattern depicted in the example illustrates what might be called “modern sector enlargement growth.” The essence of modern sector enlargement growth is that the economy is assumed to grow by enlarging the size of its modern sector, the incomes (or wages) within the modern and traditional sectors remaining the same. The discrepancy among the various income distribution measures in modern sector enlargement growth arises because this type of growth affects only some of the poor, not all. Consequently, those whose situations are not improved, and who therefore remain as poor as before, receive the same dollar amount, but it is a smaller part of a larger whole. From this, it follows that:

1. the absolute incomes of the poorest 40% are unchanged; and
2. the Lorenz curve shifts downward at its lower end, so those Lorenz-curve-based measures of relative income inequality that are sensitive to the lower end of the income distribution register a “worsening” of the income distribution.

The Lorenz curve crossing is illustrated in Fig. 1a.

A number of authors have analyzed relative inequality in modern sector enlargement growth and have shown that relative inequality *necessarily* rises in the early stages of modern sector enlargement growth, reaches a peak, and then declines as modern sector enlargement growth continues, thus tracing out Kuznets’ (1955) famous inverted-U pattern.⁸ Most observers interpret the inverted-U in modern sector enlargement growth as signifying that in a true economic sense “the distribution of income must get worse before it gets better.” I do not. Note

⁸ See Swamy (1967), Robinson (1976), Knight (1976), and Fields (1980); extensive examples were offered by Kuznets (1955) and Lydail (1977).

that the intersectoral income differential is not changing. The only change is for the better, a movement of people out of the low-income traditional sector into the higher-income modern sector I conclude that the apparent “worsening” of the income distribution in the early stages of modern sector enlargement growth is a *statistical artifact without social welfare content* Put differently, if relative-inequality-averse observers compare standard measures like Gini coefficients or income shares of the poorest 40% when modern sector enlargement growth is taking place, they may be led to social welfare judgments that *they themselves might not wish to make*. A new welfare economics of modern sector enlargement growth is needed.

Insert Figure 1 Here

The third question above questions the welfare economic foundations for assessing alternative kinds of development. Three other stylized typologies may be identified, and they are less problematical.

We might begin by defining “modern sector enrichment growth” as the case where real income is rising among a fixed number in the modern sector while real income among those left in the traditional sector remains unchanged. Relative inequality rises in this kind of growth, as shown by the Lorenz curve in Fig. 1b. This rising inequality is economically meaningful. Whether it is sufficiently important to lead the observer to prefer nongrowth is a matter of value judgment.

We might define “traditional sector enrichment growth” as a situation in which the real incomes of traditional sector workers rise while the incomes of modern sector workers and the division of the labor force between the modern and traditional sectors remains unchanged. The

Lorenz curve in Fig. 1c illustrates that relative inequality falls if there is traditional sector enrichment. By standard welfare judgments, this type of growth would be viewed favorably.

One other case is not development at all “Traditional sector immiserization” would lower national income and raise poverty and inequality. It is frowned upon.

The preceding analysis suggests that the standard measures of income inequality and the welfare interpretations derived therefrom are better suited to enrichment kinds of development than to modern sector enlargement. Although no real world country is a pure case of any of these types of growth (or nongrowth), the presence of a substantial enlargement component may undermine the usefulness of the standard procedures.

By most accounts, modern sector enlargement is an essential ingredient of development. In their famous book, Fei and Ranis (1964) wrote, “... the heart of the development problem may be said to lie in the gradual shifting of the center of gravity of the economy from the agricultural to the industrial sector...gauged in terms of the reallocation of the population between the two sectors in order to promote a gradual expansion of industrial employment and output.” This characterization is echoed by Kuznets (1966) and Lewis (1954). Empirical studies such as that of Turnham (1971) have documented the absorption of an increasing share of the population into the modern sector as growth takes place.

We may safely conclude that modern sector enlargement comprises a large and perhaps even predominant component of the growth of currently developing countries, it must be evaluated more carefully.

4. EMPIRICAL EVIDENCE ON RELATIVE INEQUALITY⁹

On Inequality at Different Stages of Development

Many authors have examined cross-sectional data on income inequality and stage of development. These studies (among them, Paukert 1973, Cline 1975, Chenery and Syrquin 1975, and Ahluwalia 1976) suggest that the relationship between relative inequality and per capita GNP tends to have an inverted-U shape: among groups of countries in the cross section, inequality rises in the early stages of economic development and falls in the middle and later stages. In all cases, the proportion of variation in inequality explained by income level is small, suggesting that the initial stage of rising inequality is avoidable.¹⁰

In addition to the association between level of GNP and income inequality, these authors have also found that the usual concomitants of economic development—in particular, improved education, declines in the importance of agriculture, urbanization, and reduced population growth—are significantly associated with relative income inequality in a cross section of LDCs. None of the existing studies finds a statistically significant relationship between the level of inequality and the short-run rate of economic growth. They also fail to establish any substantial correlation between inequality on the one hand and the importance of tax systems and agricultural productivity improvements on the other. None of these correlates of inequality is decisive, in the sense of accurately discriminating between high and low inequality countries.

⁹ See Fields (1980, Chapter 4) for details.

¹⁰ This is true for all functional forms: parabolic, skewed inverted-U, or set of dummy variables.

On Inequality Change in Less Developed Countries

We now have studies of changing relative inequality in the actual economic development histories of more than twenty less developed countries. The experiences of the thirteen countries for which data sources appear to be reliable are briefly summarized in Table 2. For this group of countries, the evidence shows that inequality rose in seven countries (Argentina, Bangladesh, Brazil, El Salvador, Mexico, the Philippines, and Puerto Rico), fell in five (Costa Rica, Pakistan, Singapore, Sri Lanka, and Taiwan), and is mixed but leaning toward a slight decline for one country (India). We may conclude that inequality has risen in slightly more countries than it has fallen, but no necessary pattern emerges.

Insert Table 2 Here

Earlier, we saw that the level of inequality in a cross section of countries tends to be systematically related to several aspects of countries' economic structure but none of these factors was found to be decisive. When it comes to changes in inequality, the evidence is similarly mixed. Scattered studies provide some information on the association between changes in the various determinants of income and changes in income inequality. No general relationship has thus far been encountered between changing inequality on the one hand and initial level of inequality, level of GNP, or rate of growth of GNP on the other. A thorough-going analysis of the relation between changing income distribution and countries' development policies and performance worldwide is yet to be undertaken. Some evidence for a limited sample of countries is summarized in Section 6 below.

On Decomposing LDC Inequality

From an examination of empirical evidence on three types of decompositions of inequality, several conclusions may be drawn:

Source decomposition studies determine which income sources account for how much of overall income inequality. From studies of Taiwan, Pakistan, and Colombia, variation in labor incomes emerges as the predominant factor accounting for income inequality. This is because labor income has the largest functional income share and because most households receive most or all of their income from the work they do. This implies that to understand the structure of income inequality in LDCs, knowledge of the determinants of incomes from wages and self-employment incomes paramount, as does an understanding of the functioning of LDC labor markets.

Sector decomposition studies ask how much inequality occurs within each sector or region of a country and how important are these intrasectoral inequalities relative to intersectoral inequality. Empirical studies on this question in many countries including Iran, the Philippines, Sri Lanka, plus the countries listed in the next paragraph, indicate a great deal more inequality within regions than across them. This implies the need to look within regions for other sources of income variability, at the level of either the worker or his job, to ascertain the sources of inequality. In addition, for policy purposes, these findings lead to the conclusion that antipoverty programs must be targeted at the poor within all regions. To limit attention to poorer regions only is too blunt a method of planning.

A third group of decomposition studies breaks down inequality by income-determining characteristics. From this literature, which covers Brazil, Mexico, Thailand, Colombia, Chile,

Venezuela, and Panama, we find that more inequality is attributable to variation in personal characteristics than to the sector of employment or locational aspects. The most powerful personal characteristics explaining inequality are education and age. Occupation, economic sector, and location make some contribution to explaining inequality, but these variables are found to have lesser effects.

Singly and together, decomposition studies in less developed countries lead to an inescapable conclusion: income variation according to attributes of individuals are of primary importance whereas variations between economic segments grouped according to sector of the economy or functional income source play a secondary role. Given this overall conclusion, the need for further microeconomic income determination studies stands out.

5. EMPIRICAL EVIDENCE ON ABSOLUTE INCOMES AND ABSOLUTE POVERTY

To analyze the determinants of absolute incomes, the earnings function developed by labor economists is a useful starting point. Together, characteristics of the individual (such as education, age, sex, and other demographic attributes) and variables pertaining to the demand side of the labor market (such as capital-intensity of the industry in which the individual works) explain at least half the variance in income and often substantially more (Psacharopoulos 1978). Human capital theory holds that education, training, and skills are the most important determinants of incomes. However, the finding that incomes and earnings are associated with more than just personal characteristics has led some analysts to question the relevance of the human capital framework in an LDC context and to look for an alternative. One such alternative is segmentation theory.

Segmentation theory starts with an obvious truth: that labor markets are not homogeneous, as evidenced by the fact that earnings differentials are systematically associated with worker and employer characteristics. Some segmentation theorists assert that segmentation theory thereby helps us explain inequality. It doesn't, at least at that level. Segmentation cannot both be defined by labor income inequality and be the cause of it. For segmentation theory to be useful, the barriers to mobility between labor market segments must be identified and their influences measured. It must be shown both that these barriers to mobility limit some individuals' income opportunities and how much their opportunities are limited. Research in this area will enrich our understanding of the forces determining low incomes in poor countries, but very little is known right now about these barriers and segments.

The interest in absolute incomes leads us to examine absolute poverty. Two pressing concerns stand out: What produces poverty? Is absolute poverty being alleviated with economic growth? Evidence from household surveys and censuses has shed light on both these issues.

Poverty profiles have been constructed for a number of countries (see Fields 1980, Table 5.2). The poor are disproportionately young, female, and in large families. If employed, it is more apt to be in agricultural occupations and rural areas or in petty commerce, services, and other backward sectors. A disproportionate number of the poor are self-employed, and if in agriculture, own disproportionately little land. This profile of poverty confirms many casual impressions, but hard quantitative evidence has been at something of a premium.

What about the relationship between absolute poverty and growth? The time series evidence, which until now has been widely scattered, is summarized in Table 3. The data show ten countries (Bangladesh, Brazil, Costa Rica, Mexico, Pakistan, Puerto Rico, Singapore, Sri Lanka, Taiwan, and Thailand) in which poverty has diminished to varying degrees. Absolute

poverty was not ameliorated in the other countries (Argentina, India, and the Philippines), poverty increasing noticeably in all three.

Insert Table 3 Here

Both the direct evidence from time series given in Table 3 and the indirect evidence from cross-sectional studies (e.g., Ahluwalia 1976) lead to the same general result: growth reduces poverty. Many countries' experiences fit this rule, though of course there are exceptions. The exceptions are of two kinds. Some countries have alleviated poverty substantially despite little economic growth. Others have experienced substantial economic growth, yet the data show no demonstrable reduction in absolute poverty.

6. DEVELOPMENT PROGRESS AND GROWTH STRATEGIES

Two fundamental questions remain: Which countries upgraded the economic positions of their poor at faster rates than others? What combinations of circumstances and policies led to differential performance? My conclusions are as follows:

(1) *The absolute poverty and relative inequality measures produce similar distributional judgments in a bare majority of cases.* The two classes of measures have been calculated in twelve countries and agree with respect to direction of income distribution change in seven of the twelve cases. In five of these (Costa Rica, Pakistan, Singapore, Sri Lanka, and Taiwan), both poverty and inequality declined, while in two others (Argentina and the Philippines) both poverty and inequality increased. In five cases, however, the absolute poverty and relative inequality

measures are in conflict. In Bangladesh, Brazil, Mexico, and Puerto Rico, although relative inequality increased, absolute poverty was alleviated. A reverse pattern is found in India. There, relative inequality showed a slight decline, yet absolute: poverty rose substantially.

These results suggest that the choice of an absolute poverty or relative inequality measure is important empirically as well as theoretically in assessing the participation of the poor in economic development. We must choose between absolute poverty and relative inequality measures in accordance with the value judgments we wish to make. Perhaps the measurement issues posed in Section 2 and the welfare economic analysis of Section 3 will aid in this choice.

In Fields (1980, Chapter 6), the development progress and growth strategies in six countries are analyzed in some detail. The highlights are summarized below.

(2) *A high rate of aggregate economic growth rate is neither necessary nor sufficient for reducing absolute poverty.* The six countries' experiences are shown in Table 4.

“Trickle down ' theory holds that incomes of the poor rise when economic growth is taking place. By this theory, we would expect the six countries to appear in the upper right and lower left cells of Table 4. In fact, four countries' experiences accord with this prediction. However, two deviant cases stand out—the Philippines and Sri Lanka. The Philippines grew rapidly, yet incomes of the poor were not appreciably raised. On the other hand, Sri Lanka grew very slowly, yet absolute poverty was substantially reduced. We have no readily calculable index of these countries' commitment to helping the poor toward a better life. Nonetheless, it can fairly be said that in both countries the outcome is clearly linked to public policy—welfare statism as part of a large scale antipoverty campaign in Sri Lanka, virtual inattention to the poverty problem in the Philippines over the period of analysis.

Insert Table 4 Here

(3) A high rate of aggregate economic growth is neither necessary nor sufficient for reducing relative inequality, as shown in the Table 5.

The two fastest growing countries—Taiwan and Costa Rica—experienced declining inequality, as did the two slowest growing countries—Sri Lanka and India. These four countries pursued development strategies in which rural development figured heavily. Inequality increased in the two countries with moderate to high growth rates—the Philippines and Brazil. Both these countries followed uneven development strategies aimed at modern industrial enclaves that engage relatively few people.

These data suggest a pattern that may not be entirely accidental. It is arguable, though far from proven, that a distributionally oriented development program that integrates the poor into the mainstream of the economy may cause a higher growth rate, other things equal. Conversely, a development strategy aimed at a limited segment of the economy may result in a lower growth rate than could be achieved given that country's resource endowment. In the present state of our knowledge, we do not understand the economic, political, or sociological dynamics of growth well enough to evaluate the merits of this argument. Research on this quest on merits highest priority among development economists and planners.

Insert Table 5 Here

(4) *Commitment toward helping the poor is neither necessary nor sufficient to insure progress.* India, it seems, was committed to improving conditions for the poor, at least if one believes the rhetoric (though the actuality may have been otherwise); despite its seeming commitment, India did not succeed. Taiwan did not appear to be particularly committed, judging from public pronouncements; but its actions suggest that it may well have done more of the things for the purpose of helping the poor majority. Sri Lanka was committed and did succeed. Brazil and the Philippines showed little commitment toward spreading the benefits of growth widely; in both countries, the gains were highly concentrated.

These country studies lead me to advance a general rule as a working hypothesis: In the absence of a firm commitment to developing for the poor and the courage to act on that commitment, it seems only natural that economic systems will perpetuate the flow of resources to the haves with at best some trickle-down to the have-nots. More may trickle-down to the poor in some cases than in others. Commitment toward developing to help the poor does not guarantee progress, but it helps.

(5) *Progress in alleviating poverty is mirrored in changing labor market conditions.* The poor may benefit from economic growth because of modern sector enlargement or traditional sector enrichment. I define “modern sector enlargement” as an expansion in the number of relatively high-paying jobs so as to employ a larger percentage of the economically active population. “Traditional sector enrichment” is the increase in wages, or incomes in the major occupational groups in which the poor are found. Qualitative data on the enlargement and enrichment; components of development in the six countries are displayed in Table 6. In the two countries with both high rates of modern sector enlargement and indications of traditional sector enrichment (Taiwan and Costa Rica), poverty was alleviated rapidly. The two countries with

modern sector enlargement or traditional sector enrichment but not both (Sri Lanka and Brazil) also alleviated poverty. In the two countries with neither modern sector enlargement nor traditional sector enrichment (the Philippines and India) absolute poverty worsened. This pattern implies that understanding the forces influencing employment and wage structures in less developed country labor markets and their changes over time is central to explaining the causes of poverty and its amelioration or exacerbation in the process of economic growth. But that is a whole other study yet to be done.

Insert Table 6 Here

7. CONCLUSIONS

Improving the income distribution is today a favorite goal of development economists and planners. Unfortunately, there is no clear agreement as to what that objective really means. Three alternative income distribution concepts—relative inequality, absolute poverty, and relative poverty—were distinguished in this paper. Sometimes, in the pursuit of one of these income distribution objectives, another may suffer. For instance, given resource and policy constraints, a strategy of building up an investible surplus in the hands of the middle and upper classes may lead to rising inequality. This inequality might have to be tolerated in order to generate enough additional production to permit absolute poverty to be alleviated. In this event, poverty alleviation and inequality reduction are conflicting objectives. More generally, policies

must be formulated on the basis of a clear statement of purpose as to what the primary distributional objective in fact is.

One reasonable goal is the reduction of relative inequality. Both cross-sectional and time series studies reveal statistically significant but weak inverse relationships between the level of national income and the degree of relative income inequality. However, the exceptions to any general pattern are nearly as numerous as the supporting cases. Research into six countries' experiences gives empirical support to the view that what matters in determining inequality is not growth itself but rather the kind of growth policies and strategies pursued. Decentralized development programs have indeed narrowed the relative gap between rich and poor. Policies such as rural development, export promotion, universal education, and wage restraint merit serious consideration in this regard.

Reducing absolute poverty may merit even higher priority. Although economic growth may help lessen poverty, it is not sufficient. The character of the growth appears to be a more important determinant of poverty reduction than is the rate of growth. When growth policies are evaluated from an antipoverty perspective, some hard questions need to be asked. Are the growth policies oriented toward expanding earning opportunities and enlarging modern sector employment? Toward renting new markets for the goods produced by the poor? Toward distributing goods and services to them in order to fulfill their basic human needs? Only when these issues are addressed can we know if policies to promote growth actually contribute to development.

From studies of income determination, we have obtained poverty profiles and gotten insights into some of the causal mechanisms at work. The poor are found in large numbers in all industries, sectors, and regions. There is much more inequality within these aggregates than

between them. We may conclude from this that policy planning must be targeted at poor people rather than at poor groups, lest the advantaged members of the poorer groups appropriate the bulk of the benefits while the needy are not readied. Studies have also shown that labor income inequality accounts for the major part of total income inequality. It follows that research needs to be focused on the operation of labor markets and the determinants of job opportunities.

My own feeling is that a policy of allowing high concentrations of income and wealth and not attending to the poverty population may be doubly harmful. Not only does it leave less for the poor at present. Such a policy might in fact hamper economic growth if the rich spend their money abroad, purchase imported goods, and invest in unproductive ways such as in land speculation, whereas if the poor had those resources they would invest in the productivity of their farms, the quality of their houses, and the education of their children. Too little is known now to say whether this possibility is an actuality.

To assess what has happened in the past, to explain why it happened, and to plan for the future, refined models of growth as a cause of income distribution and of distribution as a cause of growth are needed. This paper will have succeeded if it has provided some of the factual and analytical bases for carrying out this task.

Table 1

Table 1: Three Ways of Measuring Who Benefits From Economic Development**Example 1**

Country	Growth of National Income	Income Share of Lowest 40%: Level % Change		Gini Coefficient Level % Change	
		Both countries initially		0.363	
Country A later	9%	0.333	- 8%	0.133	+62%
Country B later	18%	0.307	- 13%	0.162	+97%

Example 2

Country	Percentage of Labor Force in:		
	High Wage Jobs (Real Wage = \$2)	Low Wage Jobs (Real Wage = \$1)	Rate of Growth of High Wage Jobs
Both countries initially	10%	90%	
Country C later	20%	80%	100%
Country D later	30%	70%	200%

Example 3

Country	Absolute Income of Poorest 40% of Population
Both countries initially	\$40
Country E later	\$40
Country F later	\$40

Table 2

Table 2: Economic Growth and Changing Inequality in Less Developed Countries

Country and Year	Data Patterns	Summary
Argentina, 1953-61	Gini coefficient among families rose Income share of richest decile rose Income share of poorest decile fell	inequality rose
Bangladesh, 1963/64-73/74	Gini coefficient among rural households rose Gini coefficient among urban households rose	Inequality rose
Brazil, 1960-70	Gini coefficient among persons rose Income share of richest 3.2% rose	Inequality rose
Costa Rica, 1961-71	Gini coefficient among families fell Income share of richest 5% fell Income share of poorest 40% rose	Inequality fell
El Salvador, 1945-61	Income share of richest 20% of individuals rose Income share of poorest 60% of individuals fell	Inequality rose
India, 1960/61-1968/69	Gini coefficient among rural families fell Gini coefficient among urban families unchanged Other contradictory estimates also available	Inequality fell, mixed evidence
Mexico, 1963-75	Gini coefficient among individuals rose Income share of poorest 40% fell Income share of top 10% rose	Inequality rose
Pakistan, 1963/64-1969/70	Gini coefficient among rural households fell Gini coefficient among urban households fell Gini coefficient nationally fell	inequality fell
Philippines, 1961-71	Gini coefficient among families unchanged Ratio of income of top quintile to bottom quintile rose	Inequality rose
Puerto Rico, 1953-63	Income share of richest 5% of families fell Income share of poorest decile fell Gini coefficient among families rose	Inequality rose, mixed evidence
Singapore, 1966-75	Gini coefficient among individuals fell	Inequality fell

continued

Table 2 (continued)

Country and Year	Data Patterns	Summary
Sri Lanka, 1953–73	Gini coefficient among spending units fell Income share of richest decile fell Income share of poorest decile rose	Inequality fell
Taiwan, 1950s–70s	Gini coefficient among households fell Ratio of income share of top 10% to bottom 10% fell	Inequality fell

Source: Fields (1980, Table 4.6).

Table 3

Table 3: Economic Growth and Absolute Poverty in Less Developed Countries

Country	Data Patterns	Summary
Argentina, 1953-61	Real personal income among persons in the remunerated population fell.	Poverty rose
Bangladesh, 1963/64-73/74	Proportion of population below "minimum acceptable consumption requirement" fell Sen's poverty index among rural households rose Sen's poverty index among urban households fell	Poverty fell, mixed evidence
Brazil, 1960-70	Proportion of economically active population below minimum wage fell Average income of those below minimum wage rose	Poverty fell
Costa Rica, 1961-71	Proportions of families with real absolute incomes below 250 and 500 constant colones fell	Poverty fell
India, 1960/61-68/69	Proportion of rural population below Rs. 15 constant per capita per month rose Proportion of urban population below Rs. 18 constant per capita per month rose	Poverty rose
Mexico, 1963-69	Average annual income of poorest decile of families in constant prices rose	Poverty fell
Pakistan, 1963/64-69/70	Proportions of persons with consumption below four specified constant lines fell	Poverty fell
Philippines, 1961-71	Average annual income per family in real terms among poorest quintile fell	Poverty rose
Puerto Rico, 1953-63	Rate of growth of real income among families was positive for all deciles including the poorest three	Poverty fell
Singapore, 1966-75	Proportion of persons with incomes below \$200 per month in 1975 prices fell	Poverty fell
Sri Lanka, 1953-73	Proportions of income recipients with incomes below 100 and 200 rupees (in 1963 rupees) fell	Poverty fell
Taiwan, 1964-72	Proportions of households with incomes below Constant NT \$20,000, 30,000 and 40,000 all fell	Poverty fell
Thailand, 1962/63-68/69	Proportion of households with incomes below 1500 baht (in constant prices) fell	Poverty fell

Source: Fields (1989, Table 5.5)

Table 4

Table 4: Six Countries--Growth and Poverty Change

	High Growth	Low Growth
Increasing Poverty	Philippines	India
Decreasing Poverty	Taiwan Costa Rica Brazil	Sri Lanka

Table 5

Table 5: Six Countries—Growth and Inequality Change

	High Growth	Low Growth
Increasing Inequality	Philippine Brazil	
Decreasing Inequality	Costa Rica Taiwan	Sri Lanka India

Table 6

Table 6: Six Countries: Enlargement and Enrichment Components of Changing Labor Market Conditions

Country	Modern Sector Enlargement	Traditional Sector Enrichment	Modern Sector Enrichment
Costa Rica	High	Yes	Yes
Sri Lanka	Low	Yes	No
India	Low, if any	Negative	No
Brazil	Low	Yes & No	Yes
Philippines	Low	Negative	Yes
Tai van	High	Yes	Yes

Figure 1

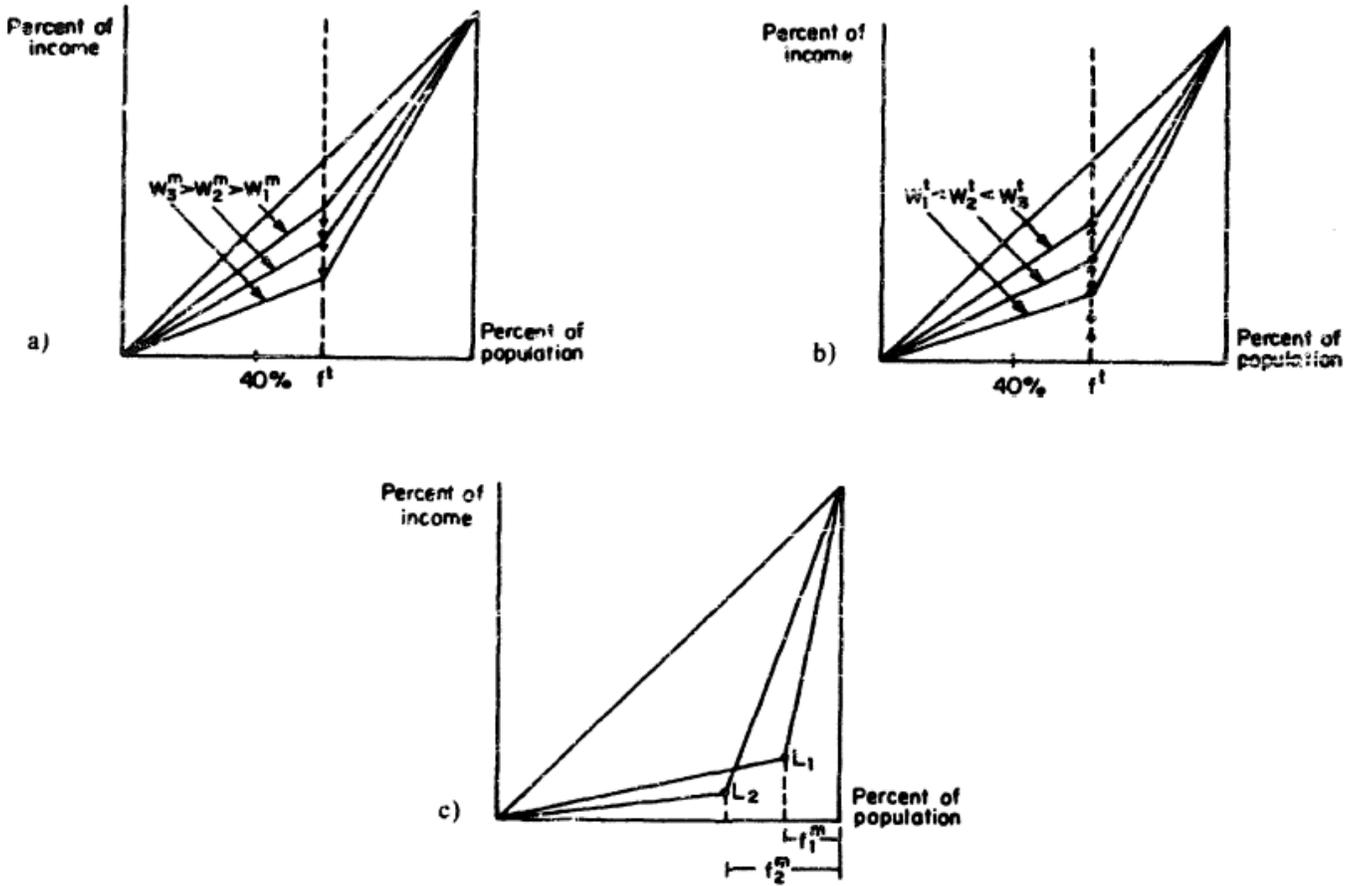


Figure 1.

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