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DISCUSSION PAPER NO. 133

Canadian Foreign Aid
and Income Distribution

by

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RÉSUMÉ

1. La pauvreté matérielle est très répandue dans le Tiers Monde; le souci de la faire disparaître est sans doute la principale raison de l'aide extérieure. Dans certains pays, comme dans la plupart des pays d'Amérique Latine, il serait possible d'extirper la pauvreté grâce à une redistribution modérée des revenus; dans la majorité des autres, l'inégalité des revenus est une des principales causes de la pauvreté.

2. Bien qu'un grand nombre de pays du Tiers Monde aient atteint des taux de croissance satisfaisants depuis la fin de la Deuxième Guerre mondiale, on craint de plus en plus que les fruits de cette croissance n'aient été mal répartis, de sorte que les groupes à faible revenu sont restés pauvres, et sont même peut-être devenus plus pauvres.

3. Nous ne pouvons tirer aucune conclusion générale valable à partir des tendances de la distribution des revenus, dans les pays en développement, au cours des dernières décennies. Il est fort possible que cette répartition se soit aggravée dans certains des pays les plus pauvres, comme le Ghana, Le Bangladesh, les Philippines et autres. (Pour plus de détails, voir les annexes.)[1]

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1 Ces annexes, qui sont plutôt de nature technique, n'ont pas été incluses dans le document, mais sont disponibles dans les bibliothèques du Conseil économique du Canada, du ministère des Affaires extérieures et de l'Agence canadienne de développement international.

4. Rien n'indique encore, de façon probante, une diminution générale des normes de revenu des pauvres dans le Tiers Monde. Il semble plutôt que, dans la plupart des pays, les pauvres bénéficient de certains fruits du développement; la véritable question est de savoir si leur part est suffisante selon des critères moraux, sociaux et politiques.

5. A l'exception des pays socialistes, la plupart des gouvernements des pays en développement n'ont pas accordé une haute priorité à l'amélioraton de la répartition des revenus. La chose est attribuable surtout à des processus politiques normaux (peu de gouvernements représentent les pauvres) et, deuxièmement, à de mauvaises interprétations des moyens d'améliorer le sort des pauvres.

6. La plupart des organismes qui dispensent de l'aide extérieure ont toujours été prudents dans leurs perspectives, jusqu'à récemment, et il semble plus que probable que leur participation a généralement aggravé la répartition des revenus dans les pays en développement au lieu de l'améliorer, si l'on fait abstraction de l'aide alimentaire, qui peut avoir des effets positifs. L'insistance plus grande, ces derniers temps, sur la répartition des revenus, a modifié un peu cette tendance; mais il reste à voir dans quelle mesure.

7. Parmi les grands problèmes qui confrontent tout organisme d'aide extérieure désirant favoriser les pauvres plus que les riches dans les pays bénéficiaires, mentionnons le manque général d'expérience pour les aider (les pauvres) à accroître leur productivité, et le fait que les pays industrialisés connaissent mieux les moyens modernes (fondés sur l'équipement) de faire les choses que les méthodes qui font plutôt appel à la main-d'oeuvre. En outre, le financement se limitant aux coûts du pays donateur et la formule de l'aide liée incitent à l'utilisation d'une technologie qui n'est pas nécessairement la plus appropriée.

8. Le programme d'aide extérieure du Canada souffre de tous les problèmes que nous avons mentionnés. L'accent qu'il met sur les pays les plus pauvres et sur l'aide alimentaire est de bon augure, même s'il ne faut pas, en réalité, en attendre des effets distributifs positifs. Il faudrait se préoccuper davantage des programmes bilatériaux non alimentaires. L'ACDI et ses experts-conseils auraient beaucoup de difficulté à produire des analyses qui tiennent compte des effets distributifs de ces programmes en général, et, en fait, il est inévitable que plusieurs projets de valeur douteuse ne seront pas détectés à moins qu'on accorde une forte priorité à l'analyse de leurs conséquences. Cela exigerait probablement, entre autres choses, des cours ou des sessions de recyclage pour le personnel de l'ACDI, et supposerait surtout un choix minutieux des experts-conseils.

9. Plusieurs des problèmes que posent les effets distributifs positifs à court terme de l'aide extérieure peuvent, en fait, être difficiles à résoudre. Mais nous n'en sommes pas complètement sûrs, car les tentatives sérieuses en ce sens sont fort récentes. Si c'est le cas, cependant, et si, de façon générale, il se révèle difficile de stimuler une croissance rapide sans aggraver la répartition des revenus, il ne faudrait quand même pas oublier que, à long terme, l'impact de la croissance sera probablement positif, à en juger par les répartitions généralement moins inégales dans les pays plus développés. Ce qui importe, c'est de viser à la croissance en même temps qu'à la redistribution, combinaison d'objectifs dont la réalisation n'a jamais été démontrée comme impossible. De toute façon, la croissance seule demeure une chose généralement souhaitable, car il est évident que si elle a la priorité, elle s'accompagne d'effets secondaires importants.

Abstract

1. Material poverty is widespread in the Third World; overcoming it is presumably the major reason for aid. In some countries poverty could be eradicated by a modest redistribution of income (true of almost all countries in Latin America); in most other countries income inequality is a major contributor to poverty.

2. While many countries in the Third World have achieved satisfactory growth rates in the post-World War II period, there is widespread concern that the fruits of this growth have not been well shared, so that the lower income groups have remained poor, perhaps even become worse off.

3. No valid general conclusions are possible with respect to trends of income distribution in developing countries over recent decades. There is a definite possibility that distribution has worsened in some of the poorer countries such as Ghana, Bangladesh, Philippines, and others. (See the appendices for further details)[1].

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1 These appendices, which are of relatively specialized interest, have not been included with the paper but are available in the libraries of the Economic Council of Canada, the Department of External Affairs, and the Canadian International Development Agency.

4. There is no persuasive evidence to suggest a widespread worsening of income standards of the poor in the Third World. Rather, it appears that they are in most countries sharing <u>some</u> of the fruits of development; the real issue is whether their share is adequate in moral, social and political terms.

5. With the exception of the socialist countries, most LDC governments have not given high priority to improving their income distributions. This is due mainly to normal political processes (few governments represent the poor) and secondarily to misperceptions as to how to improve the lot of the poor.

6. Most foreign aid agencies have also been conservative in their outlook until rather recently, and it seems more likely that their involvement has typically worsened distribution in LDC's than improved it, if one abstracts from the effect of food aid, which is more likely to be positive. Recent re-orientations toward placing more emphasis on income distribution have changed this pattern somewhat; how much remains to be seen.

7. Major problems for any foreign aid agency hoping to benefit the poor more than the rich in recipient countries include the common lack of experience in assisting them (the poor) to raise their productivity, and the developed country's greater familiarity with modern capital intensive ways of doing things than with labour intensive ones. Further, funding only of foreign costs and tying of aid create biases against the use of appropriate technology.

8. Canada's foreign aid program is subject to all the problems just cited. Its focus on the poorer countries and the component of food aid are good omens, though they do not per se demonstrate positive distributional effects. Greater concern is warranted for the non-food bilateral programs. The moderate analytic capacity available within CIDA and its consultants would be strained to achieve adequate consideration of the distributional implications of its programs in general, and in fact it is unavoidable that many dubious projects will slip through unless high priority is given to analysis of those implications. This would probably require, among other things, some updating courses or discussions for CIDA personnel, and particularly careful choice of consultants.

9. Many of the problems in achieving a positive short-run distributional impact from foreign aid may in fact be difficult to resolve. This remains to be seen since serious attempts are so recent. If this does prove to be the case, and if more generally it turns out to be hard to stimulate fast growth without worsening income distribution, it should still be remembered that the longer run impact of growth is likely to be positive, if we may judge from the generally less unequal distributions in more developed countries. It is important to try for growth with redistribution, a combination whose achievement has not been demonstrated as impossible; and, in any case, growth is still generally desirable because of the evidence that substantial trickle down effects do result from so-called "top-first" development.

Canadian Foreign Aid and Income Distribution

Introduction

This paper discusses the impact of Canadian foreign aid on the distribution of income and the alleviation of poverty in aid recipient countries, and more generally in the developing countries as a whole. This effect would be most positive if the bulk of the benefits from the aid accrued to poorer countries, and to the poorer people within those countries.[1] Judging whether this is or is not the case involves two major obstacles; the lack of organized information on the relevant characteristics of Canada's foreign aid projects and -- a more general problem -- the complexity of the relationships between various types of aid and the distribution of benefits, a reflection of the generally underdeveloped understanding of the determinants of income distribution in developing countries. As a result of these difficulties, no firm conclusion can be drawn at this time. It is useful, however, to review some of the factors which are likely to affect the outcome. Section I reviews current wisdom on the distribution of income or welfare in developing countries, including some of the issues connected with the measurement of economic welfare (for which income may be thought of as a proxy) and its distribution. Section 2

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1 It goes without saying that Canadian aid alone could not be expected to make a great dent in world poverty. Still, in absolute terms the number of poor beneficiaries could be very great, depending on the effectiveness of the program in this regard.

summarizes existing understanding of income distribution. With this background, Section 3 considers the impact of Canadian aid on income distribution in and among the recipient countries. The reader who is not inclined to work through the first two sections will hopefully still find the third comprehensible.

I. A Review of the Evidence on the Distribution of Physical Welfare

The empirical analysis of income distribution[1] is a new field within economics and is correspondingly at an undeveloped stage, both with respect to measurement and (especially) to the understanding of the underlying determinants of the degree of inequality. The issues surrounding appropriate measurement are so important and the procedures so little standardized that they will be discussed before we turn to the evidence itself.

A. What It Is Desired to Measure

Most persons interested in a country's income distribution see it as an indicator of the welfare distribution. Data on income, even when supplemented by information on wealth and

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1 Consumption distribution or welfare distribution may be more relevant, but most figures still relate to income distribution.

consumption, remains an imperfect measure of well-being, both because other factors than access to material goods affect peoples' satisfaction and because satisfaction may be as much related to one's income (or consumption) relative to one's aspirations as by the absolute level of income (or consumption). Aspirations are obviously influenced by the levels achieved by other members of the community or society.

Since it is hard (at least for economists) to evaluate the effect of relative income on welfare, in practice no attempts appear to have been made to quantify beyond the distribution of material consumption or the access thereto provided by income and wealth. The conceptual and methodological issues related to income distribution have thus revolved around the best way to quantify material well-being.

The most plausible indicators of the relative material well-being of a person are some measure of lifetime consumption and some measure of potential lifetime consumption (e.g. actual consumption plus wealth at end of life[1]). Potential

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1 More refined measures could be designed, since wealth can be lost as well as used for consumption purposes. A person may periodically have high consumption potential without ever consuming much, and may still wind up with little or no wealth.

consumption may be greater than actual consumption if the individual places a high enough value on risk aversion, on passing wealth to the next generation, or on simply being wealthy. Clearly it would be inappropriate to consider a person poor if his wealth is high, even if his consumption is low. A strong argument can be made that potential consumption is the best measure of material welfare. Actual consumption has the special feature, however, that the level achieved by one person is more likely to impinge on the satisfaction achieved by others than is the case with potential consumption. In any case, an argument can easily be made that each of these measures can contribute to our understanding of the relative welfare of various people.

The distribution of current income (whether by families, income earners, or persons) has been the focus of most discussions so far. This emphasis has partly resulted from the central position of that variable in national accounting, and perhaps also from the idea that potential consumption, as measured by income, is a more interesting measure of material well-being than actual consumption. In the latter context, however, information on income is not satisfactory by itself; it should be complemented by information on wealth. Also, information on income generated in the current production process -- the relevant variable in national income accounting -- is conceptually inappropriate for discussions of distribution, since capital gains and losses are equally relevant.

A final conceptual matter relates to the treatment of public consumption, i.e., expenditures undertaken on people's behalf by the government. In principle it is appropriate to add this item to private expenditure to arrive at total expenditure, or to private disposable income to arrive at total income. This is not frequently attempted due to data and measurement problems and, in the case of true public goods, to more difficult conceptual problems as well.

B. Practical Considerations in the Measurement of Material Well-Being

Whatever variables are used to compare the material conditions of life for different people, the natural unit is the individual. But since individuals are grouped in families, whose members consume some items collectively and pool some or all of their income, much information on income is collected at the level of the family and all information on consumption is. Very little is known about distribution of income and consumption within the family, so economists have normally opted for the assumption of an equal distribution, with equal amounts going either to each person or to each adult equivalent.[1] When

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1 As a result adult equivalent is defined as the number of children (of a given age) who consume as much as one adult.

information on family size is not available, it may be unavoidable to talk in terms of unadjusted family income distribution. On other occasions data on income is available by earner and not by family; the direct information on welfare distribution provided is again less than for distribution by person (i.e. by family with information on family size). Since the analyst often cannot control the form in which the data come, it becomes important to generalize where possible about the empirical relationship of the conceptually less interesting distributions with the conceptually more interesting ones.

As among (current) consumption, (current) income, and wealth distributions, practical factors again affect relative usefulness. Wealth information is definitely of interest, but is probably the hardest to obtain with a reasonable degree of accuracy; at any rate many fewer attempts have been made at the estimation of wealth distribution than of income and consumption distributions. As between current income and current consumption, there are several arguments to suggest that the latter is the more useful piece of information. First, it appears usually to be better measured than income.[1] The income data from

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1 In many income and expenditure surveys, the estimated rate of savings is well below that suggested by other types of information (e.g. evidence on build-up of financial and other assets), sometimes even negative. This implies that consumption is more fully recorded than income.

household surveys, when blown up to an estimate of personal income[1] typically account for 50-80 percent of the national accounts estimate of the same variable, when the latter is calculated on the basis of output data. Consumption is more likely to be 60-90 percent of the national/accounts estimate.[2] Few people believe that national accounts tend to overestimate true values of the variables they seek to measure; rather the opposite. A second advantage of the variable consumption is its greater stability than income. Even if one's concern is with a person or family's typical income over a short period of a few years, the income over a period from a week to four months (commonly chosen periods in surveys) may be a poor reflection; consumption may give a better idea. This argument becomes stronger the longer the income period in which one is conceptually interested. Young people and old people often consume above their current income levels, but in accord with their expected (in the case of the young) or actual (in the case of the old) average incomes over long

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1 i.e. when multiplied by the ratio of population to the size of the sample.

2 See, for example, A. Berry "Trends in Income and Consumption Distribution in the Philippines", Review of Income and Wealth, June 1978.

periods. Consumption is often viewed as the best available proxy for "permanent" or "normal" income. The instability of income is such that the distributions of current income and of current consumption can look rather different. For example, in the Philippines, while the share of the bottom quintile of families in reported income in 1970-71 was 3.7 percent, its share of consumption was about 6 percent.[1]

The problem of non-comparability of families or individuals at different stages in the life cycle is in a sense related to that of income instability. In a society where incomes are typically much lower for young people than for those in mid career,-over life distribution could be quite egalitarian; but, at a point of time, current income distribution (and probably to a lesser extent current consumption distribution) could be fairly unequal. The existence of income variability over the life cycle is an interesting aspect of an economy, but is not directly relevant to questions of equity. To circumvent the problems it poses for cross-country or over-time comparisons of inequality, some students have measured inequality among people in the same age range (or families with household heads in the same range).

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1 See A. Berry, "Income and Consumption Distribution Trends in The Philippines", op. cit.

Income variability of a less systematic sort creates another issue in the interpretation of income or consumption distribution data. If there is considerable randomness in income (consumption) determination, so that even families of a given age cohort reverse positions in the income profile fairly frequently, then the distribution at a point of time is likely to exaggerate the inequality which would be observed over a longer period. Very little evidence exists on this issue, since only a few longitudinal studies have been done.

At the conceptual level, there is little to be said for comparisons of consumption of specific items, income from specific sources, or wealth in specific forms as indicators of overall welfare, since only the corresponding totals are really relevant if it is accepted that no social judgments on people's welfare should be based on the idea that a dollar obtained or used one way is different from a dollar obtained or used another way.[1] There are, however, practical reasons to consider certain specific indicators as relevant and helpful. Among these indicators are:

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1 This presumption loses much of its merit, however, where such social problems as alcoholism of family head are prevalent. But the difficulties such situations create for welfare measurement are better described as the result of our general lack of information with respect to the intra-family distribution of consumption.

1. Health and Nutrition. These are positively correlated with income, wealth and consumption expenditures, but not by any means perfectly correlated; direct measurement has a number of advantages. Health is affected both by exogenous factors (climate, for example) and by public expenditures, which are virtually never taken account of in consumption or income distribution estimates, so direct measurement can in effect improve the measurement of total income. Nutrition may be affected by knowledge of food values, as well as by purchasing power. In short, since the relationship between total income or consumption and welfare is obviously a somewhat loose one, the achievement of certain levels of nutrition or health -- something for which one presumes the price elasticity of demand is rather low -- are likely to imply something about the level of overall welfare.

2. Education. Education currently being received is usually paid for by the government in poorer countries so, as an element of public consumption, its inclusion in family income and consumption estimates may improve the

measurement of those variables.[1] Also, as a form of capital or wealth which will affect future income streams, it is clearly relevant. It is one of the easier forms of wealth to get a reasonably accurate measure of.

3. Food or staple food consumption. This may be a good proxy for nutrition or even for health. Since income and consumption figures suffer from numerous deficiencies -- inaccuracies of measurement and problems of interpretation -- this variable may give a better indicator of welfare in certain cases. Again, it is presumed that the price elasticity of demand for basic food items is low, so a low level of consumption implies low income.

4. Housing. Information on quality of housing can improve our knowledge of current living standards (cf. nutrition); being also a form of wealth (when owned) it provides one of the more

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1 As with any form of public consumption, there is the problem of estimating the value of a given service to different users. This value may vary widely by families and may bear no necessary relation to cost.

solid pieces of information along those lines. Being measurable in physical terms, though not necessarily in any simple one or two dimensional way, it is not vulnerable to the errors which can afflict measures of changes in total income or consumption over time due to errors in the price series used as deflators.

Related to but distinct from measurement either of total consumption or of consumption of specific items is the use of data on consumption composition. One of the stylized facts of economic life is the decrease in the share of consumption expenditures going to food and other necessities as real income rises. When, as is often the case, data on total consumption are defective or hard to interpret in welfare terms, those on its composition may be more revealing. This may be especially true in the context of cross country comparisons where it is difficult to decide how to convert values among the various currencies. There are, of course, other factors than the level of development which affect consumption composition (e.g. relative prices) and these must be allowed for in interpreting the data. But there are very clear patterns relating composition to the level of development.

It should be emphasized that it is of no particular importance whether some of these measures of specific items are or are not superior to measures of total income, consumption, etc. (In fact, the usefulness depends not only on accuracy but also on the precise interest one has). What is evident is that most measures are still quite deficient relative to any standard of perfection, so it is important to have as much information as possible, to enrich the detail of our picture of distribution and poverty and to provide internal consistency checks.

As noted earlier, incomes may be underreported by an average of up to 50 percent due to problems of recall, failure to understand questions, or deliberate understatement. Consumption will normally be understated by less. Very little information exists on what types of respondents understate more; there is a need for highly detailed follow-up analysis to provide useful generalizations along these lines. It may be hypothesized however, that serious inaccuracies characterize the reporting of independent workers (like farmers)[1], as well as

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1 Farmers are characterized by another source of inaccuracy -- the fact that when income levels are low the ratio of home consumption to total consumption may be high. There is a tendency for such income in kind to be missed in response to questions. In agriculture, income is also highly seasonal. A sample which seeks to measure that of the last week or month must suffer a high error vis-à-vis annual income. But recall problems arise when the period defined is too long. Increasingly samples are trying to avoid this problem by including questions relating to several different periods of time.

people with multiple sources of income, because of the complexity of the calculation needed to arrive at the true figure. In general, it seems probable that capital income will be less well recorded than labour income. There is no presumption that underreporting is similar across income levels, so it is quite probable that it leads to errors in the estimation of relative incomes.

Problems of value comparisons across groups facing different prices are also serious. Income and consumption data are expressed in value terms, and comparisons of these values are only strictly accurate if the implicit prices for various individuals or groups are the same. As between rural and urban areas this is generally not the case, and to the extent that one price vector is on balance higher than the other, errors are introduced. This problem plagues both distribution analyses at a point of time and over time (if, as is usually the case, the distribution of population between rural and urban areas changes over time).

Among the various indicators of material well-being cited above, some are more expensive to obtain than others; some are available as by-products of other types of analysis. The accuracy of some depends more on the quality of the information gathering process than for others. Some are harder to make comparable over time than others. These practical matters determine the relative usefulness of the various indicators under specific conditions and for specific types of analysis.

Many different uses of distribution data may be conceived of. Here we distinguish only a few:

1. <u>Measurement of Income Inequality at a Point of Time</u>

   In attempting to get a good reading on inequality with respect to the material side of life at a given point or reference period, an income and consumption survey is the most important single piece of information. (Surveys of wealth would be of equal interest but it remains to be seen how feasible they are). It could, though usually does not, include data on housing and education. Sometimes information on these is available from other sources and reasonable guesses can be made about the relation between these services and income (or consumption). Nutrition and health surveys must be done by specialists, and are an important component of the information on poverty and distribution.[1]

2. <u>Analysis of Trends in Income Distribution and of the Absolute Income of the Poor</u>

   This important objective presents special problems. Statistically demonstrating that income distribution

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1 The degree of expertise required to get data on consumption, income, and wealth should not be underestimated either. In some countries there are strong social factors operating against full reporting of income for a large share of earners, and for self-employed persons the measurement of income is in itself very complicated. This helps to explain the wide range of underreporting sometimes observed across different samples in the same country.

is very bad, or fairly bad, or not too bad calls for only modest accuracy of measurement; to judge how distribution is changing over short periods like a decade or so calls for much greater accuracy. Accordingly the conceptual and statistical comparability of the data used to make such judgments takes on greater importance. Household income and expenditure surveys can be comparable, given sufficient continuity of methodology and personnel, but in most LDC's this stage either has not been reached or has been reached too recently to provide much easily useful evidence for the analysis of trends.[1] As a result, recourse to less obvious types of information may become important. Wage and income trends for specific groups, especially those at the lower end of the income scale, are sometimes available e.g. wage data from agriculture, construction and manufacturing; data on output or income of small farmers, etc. Since the collection procedure for such data may be more routinized than that in broader income surveys, quality is likely to be higher and

1 Where meticulous study of differences across surveys is undertaken, it is of course possible to learn more.

over time comparability may be much higher. Even with such information, complemented by judicious use of survey results, it may be difficult to say much about trends in many LDC's. Data on health, housing, and consumption of staple foods then become of particular value. Housing data (at a national scale) usually come only from censuses; health surveys are also infrequent. Both are therefore relevant with respect to trends over a decade or more, and do not help much with analysis of current trends. One datum which may is staple food consumption. It appears in expenditure surveys, but may also be available on a more continuous basis, e.g. as part of food balance sheet estimates, in which case it is an additional source of information.

3. Analysis of the Impact of Public Policy on Income Distribution and/or the Incomes of the Poor

Our ultimate operational concern is the effects of public policy on income distribution. Analysis of those effects may be based on consideration of a past period or it may necessitate judging current trends. When there is the possibility of modifying policy according to its impact, the latter is the case. Analyses of the current effects of policy face the very severe data problem that income trends of various groups, hard to judge even in retrospect when various types of evidence have become available, are even harder to judge contemporaneously. Frequently the unavailability of national survey data leads analysts to use local surveys relating to the target group (if this can be defined). Such studies must be very carefully designed and interpreted to be successful. Where the target group is not so easily defined (e.g. not a specific region), they may not be useful in any case.

The major problem, however, in analyzing policy impact is the need to understand all the major determinants of income distribution and its trends before one can relate any changes to specific policies. Our understanding of these processes is at this point rudimentary, especially with respect to those modest manipulations which most governments consider to be politically and technically feasible.

C. Distribution Patterns and Trends in Selected Countries

This section reviews available information on the distribution patterns and trends in LDC's in general and in selected countries of interest to Canada as an aid giver.

Uncertainties relate not mainly to whether the available data suggest certain relationships between distribution and economic variables (like income per capita) but to whether these observed relationships are spurious, related to defects in the data base. All cross-country and over-time data relating to more than one or two countries involve only the variable income (as opposed to consumption or wealth). Income reporting is often very incomplete, and there are many reasons to expect underreporting to be related systematically to sector, type of income, level of development and other variables (see the discussion below). And the relationship between income expressed in monetary terms and that expressed in real terms is likely to vary between rural and urban areas, between types of jobs, according to distance travelled to work, etc.

Leaving these problems aside for a moment, the major generalizations suggested by the data are the following:

1. Income distribution is less unequal in socialist countries than in capitalist ones.[1] This result is hardly surprising. Frank and Webb note the importance of widespread social services in socialist countries, and some capitalist countries.

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1 As reported, for example, in Montek Ahluwalia, "Inequality, Poverty, and Development", Journal of Development Economics, No. 3, 1976.

"social services such as education, population control, medical care, sanitation and water supplies, are sometimes widely available for the poor as well as the rich. For example, Oftedal and Levinson .... point out that some socialist countries, such as the Peoples Republic of China, Cuba, North Vietnam, and Tanzania, have a paramedical approach to health care, emphasizing inexpensive and widespread treatment. By contrast, conventional health programs involve highly trained doctors and expensive care in narrowly distributed services. There are also examples of wide distribution of social services in nonsocialist countries. For example, Taiwan emphasizes services for the rural poor, partly for historical reasons. The Japanese administration contributed public health campaigns, expanded education, railroad, road, and other infrastructure development, and scientific agronomy. When the Nationalist Chinese came from the mainland, they assumed complete political control. The wealthy entrepreneurs and elites of the island generally were native Taiwanese, while a majority of the immigrant Chinese became small farmers. The government, therefore, paid considerably more attention to the needs of the rural population -- both the immigrant Chinese and the original Taiwanese peasants -- than to those of the more urbanized, native Taiwanese.[1]

2. In capitalist countries the level of inequality of income appears to bear a quadratic relationship with the level of income or development. The hypothesis was originally advanced by Kuznets on the basis of historical data for the now developed countries[2] and has since been verified for the cross section by several authors.[3] Numerous hypotheses have been advanced to explain this phenomenon, but it is naturally difficult to sort out the process of causation. Many variables like share of agriculture in total output, level of education, etc. are associated with level of development and therefore with

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1 Charles R. Frank Jr. and Richard C. Webb, Income Distribution and Growth in the Less Developed Countries, Washington D.C., The Brookings Institution, 1977, p. 8.

2 Simon Kuznets "Economic Growth and Income Inequality", American Economic Review, March 1955.

3 Ahluwalia, op. cit., Felix Paukert, "Income Distribution at Different Levels of Development", International Labour Review, August-September 1973; Irma Adelman and C. T. Morris, Economic Growth and Social Equity in Developing Countries, Stanford University Press, Stanford, Ca., 1973.

distribution. Presumably some of them do play a role in the causal relationship between measured distribution and level of development. The shift from agriculture to non-agriculture is probably one such factor; most surveys are likely to underreport income from agriculture more than that from other sectors, creating an artificial income differential. Higher urban than rural prices may work in the same direction. And, as the population structure shifts from rural to urban areas, there may be a non-monetary loss related to preference for rural life. All these factors would suggest that the role of the agriculture to non-agriculture shift in the creation of the "U" pattern of distribution may be partly or wholly artificial.

The same is not likely to be true of the trends over time in the distribution of education. It appears that human capital so obtained becomes more unequally distributed in the early phases of development, then more equally.[1]

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1 Ahluwalia found that both the share of output in agriculture and education proxies were associated with the observed level of inequality, even when per capita income was also included in the regressions. Level of literacy was positively associated with inequality and secondary school enrollment negatively (Ahluwalia, "Inequality, Poverty, and Development," op. cit., pp. 320-23.

It is worth noting that a worsening, then improving distribution is predicted by the main variants of the labour surplus model. The supply price of labour is expected to rise less rapidly than its marginal product (if indeed it rises at all) during the labour surplus phase, so that the share of modern sector capitalists in national income increases. Later, when the wage is determined by marginal productivity, the labour share is likely to rise.[1] Since many developing countries have recorded constant or falling wages over the last couple of decades, this model takes on additional interest.

Alternatively, the "U" relationship may reflect trends in the distribution of capital. Since human and physical capital command the lion's share of national income in nearly all countries at nearly all points of time, the distribution of that income must depend, probably more than anything else, on the distribution of this capital. Trends in income distribution must depend substantially on the trends in capital distribution. It may be that in most countries physical capital is less equally distributed in non-agricultural activities than in agriculture, given the small productive unit characteristic of the agricultural sector; this would suggest a source of worsening

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1 For a detailed discussion see A. Berry "Relative Income Distribution Paths in Neoclassical and Labour Surplus Economies" mimeo.

distribution early in development. Later, when human capital becomes more important than physical capital (either agricultural or non-agricultural), its more even distribution may contribute to a levelling of income distribution. In the absence of organized data on distribution of capital, this is at present only a hypothesis.

Current Trends

On the important question of current trends in income (or welfare) distribution, no interesting generalizations are as yet available. Discussion focussing on the "U" hypothesis -- i.e. testing the hypothesis that in very poor countries growth of per capita income will tend to be associated with worsening distribution whereas in better off countries the opposite will be true -- is inconclusive since so few developing countries have received adequately detailed analysis to date. Use of income survey data by itself can rarely create a strong presumption that the distributional trend is in one direction or another.[1] And other data (wage trends, etc.) are not by themselves conclusive either. Wage data do suggest a worsening of distribution in some countries -- where many wage rates appear not to have risen when per capita incomes have moved

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1 Since the statistical problems with the data are usually too great, as discussed above.

up. A particular information gap relates to the set of quite poor countries where, according to the U hypothesis, growth would be expected to bring a worsening of distribution. Of these India alone has received a reasonable amount of study of distributional trends, but it remains inconclusive at this point.

Some authors have argued that in many low income countries not only has inequality become more extreme but the absolute lot of the poor has been worsening as well, and/or is likely to worsen in future.[1] Both the data reviewed in Appendix A to H, and other evidence suggest that this is unlikely to have been the case in many countries over significant periods of time. While the so-called "spread effects" of growth are not as great as might be hoped, neither do they appear to be absent or negligible.[2] In countries like Brazil, Colombia, and Pakistan, where analysts have estimated that distribution worsened over some period or other, they have not in general concluded that there was

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1 Adelman and Morris (op. cit., 1973) have argued that the developing countries face the prospect of prolonged absolute impoverishment for the low income groups.

2 A view shared by Frank and Webb, op. cit., p. 7: "....improvement for the poor is possible, and not only in the wake of political revolution. Many factors appear to be raising the absolute incomes and improving the welfare of broad segments of the poor in countries with very different political settings. Despite a widespread pessimism, there does appear to be scope for policy".

absolute impoverishment of the lower income groups. Galenson, in a cross country study focussing on housing, education, health and certain public services, argued that in these respects there was considerable evidence of improvement for the lower deciles as well as for the better off. Finally, cross country comparisons at a point of time show the income of the bottom X percent (e.g. 20 percent or 40 percent) to be an increasing function of average per capita income.[1]

Since adequately detailed over-time studies are almost non-existent, the possibility remains that absolute impoverishment is accompanying growth in many countries, i.e., the above evidence, which tends to suggest the opposite, is not conclusive. But it does create a probability that the phenomenon in question is not frequent.

In appendices A to E[2] we review the evidence on income distribution in several of the major recipients of Canadian aid -- Ghana and the Ivory Cost in Africa and Bangladesh, Pakistan and Sri Lanka in Asia. Most of these countries have low average incomes, even in the context of the Third World. And only the Ivory Coast has had a high average growth rate in the last couple of decades during which some evidence can be

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1 Ahluwalia, op. cit., p. 333.

2 Available in the libraries of the Economic Council, the Department of External Affairs, and CIDA.

brought to bear on income distribution. If the cross-country data on distribution were used to predict which countries would be suffering increasing inequalities as per capita income increased, then all of these except Ghana would be.[1]

The most probable distributional trends in these particular countries over the post World War II period or that part of it for which some evidence is available appear to have been:

1) improvement in Sri Lanka (1953-73), (though there is conflicting evidence). Sri Lanka is one of the few countries which has made some serious efforts toward improved distribution and has instituted a food distribution program.

2) worsening in Ghana (1950-70, during which period income per capita is estimated to have risen by about 20 per cent) but with (a) some improvement for lower income families over the period as a whole, and (b) considerable spread of such public services as education.

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1 Though different students have estimated different income levels at which inequality reaches its peak and tends to decline.

3) probable worsening in Bangladesh, over the period beginning around 1960, but concentrated in the post independence period since 1971.

4) no discernable shift in India, (whose data were reviewed though not presented in an appendix), Pakistan, or the Ivory Coast. In no case (least of all that of Ivory Coast) does this mean that distribution was in fact unchanged, but rather that the data are inadequate to construct a case for either improvement or worsening, so neither possibility can be ruled out. Taking this set of countries as a group, it could not be argued that there was a general tendency in one direction or the other.

These countries have pursued a fairly varied range of policy options, but in only a few cases can changes in distribution be fairly persuasively identified with policy or structural change. Such appears to be the case in Sri Lanka, as mentioned above. One aspect of the worsening in Ghana appears to be related to widening wage/salary differentials as the number of Ghanaians employed in high income jobs, especially in government, rose quickly after independence and in the wake of increasing public involvement in the economy. In Ghana and the Ivory Coast, the setting of the minimum wage appears to have played an important independent role. Its real value has been allowed to remain constant or fall over extended periods in

Ghana, and the conclusion that distribution has worsened is based in large part on this fact.

It is highly speculative to guess at how various policies and events have affected distribution in the other countries. The main single impression is of its stability. Where possible, however, we do draw, in Part II below, on the experiences of those and other countries in an attempt to summarize the probable impacts of various types of policies on income distribution.

II Determinants of Income Distribution Including Government Policy

A. Determinants of Income Distribution

Section I referred briefly to some of the analyses of cross-country data which found correlations between level of income inequality and socio-economic variables. While that is a valuable contribution to the discussion, it should be evident that conclusions reached by this route are open to question both because of the obvious data weaknesses and because of dubious transferability of such correlations to the single country context. The appendices to this study present discussions of some possible determinants of income distribution and its trends (including policies designed to affect it) in a few selected countries. Not many firm conclusions can be drawn. Accordingly it is important to draw on any other sources of useful predictions of the impact of various policies. This section reviews some of this literature. As emphasized above, understanding of how income distribution is determined is in many respects shaky, so much of the discussion must be qualified.

One useful broad taxonomy of factors influencing what we call the equilibrium personal distribution of income is the following:[1]

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1 These factors correspond to a static (or long run) view of the economy, and should be distinguished from determinants related to the process of change (see below).

1. The personal or family distribution of wealth, including

   a) natural resources,

   b) reproduceable physical capital, and

   c) human capital, including innate capacities.

2. The nature of the technology, in particular whether it incorporates relatively capital intensive or relatively labor intensive production processes.

3. Market imperfections, i.e. the extent of monopoly, oligopoly, etc. in factor and product markets. This includes discrimination on the basis of race, sex, caste, etc.

4. The fiscal process. Incidence of taxes and benefits among income groups.

5. Intra-household distribution of income or consumption. In many households there is more than one income earner. How family income is pooled and how consumption is distributed among members can be a significant factor in the distribution of welfare.

The last factor cited has been little studied in a quantitative way, so it is difficult to compare its importance to the others. It is apparent, though, that in some cultures men are favoured over women in the allocation of food, for example. The main sources of differences in welfare, however, are probably not the unequal allocations of specific consumption items but the culturally determined roles into which the two sexes are channelled.

The role of the government's budget in distribution is usually limited, especially at early stages of development during which collection of most direct taxes is administratively difficult. Taxes on trade provide a substantial share of revenue and income taxes do not. Only in countries where the distributional impact of export taxes and import duties is significantly positive is the budget likely to improve distribution much. This situation is probably not frequent. At later stages of development, where income and property taxes begin to play a larger role, there is a greater possibility of effecting such redistribution. The political conditions for that result are unusual, though, and it is infrequent that these taxes take more than say 5-6 percent of national income.

The share of the public sector in total expenditures tends to rise with the level of development, but no generalizations have been reached so far as to whether these factors have a redistributive impact or not.

The role of market imperfections in determining income distribution and its skewness is an area of little study thus far in developing countries. Most of the studies done suggest that they are not a major source of static inefficiency though this may well be the result of incomplete measurement, and it may be that dynamic effects are more important than static ones.[1] It seems unlikely that the net static impact of market imperfections on distribution is dramatic but there may be exceptions; again, the cumulative effect over time could be substantial. Part of the effect they do have is a result of, and therefore indirectly attributable to, the distribution of wealth.[2]

The single key determinant is undoubtedly the distribution of wealth (including human capital). Especially in poorer countries, innate talents are probably a less significant factor than physical capital and education. With the pure labor share of national income (i.e. the share which would go as payment for labor if everyone received the unskilled wage rate)

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1 Most attempted measurements of loss from market imperfections have related to the product market. It seems clear that the least efficient market in most countries is the capital market; inefficiency can lead to lower savings and investment rates, whose cumulative effects over time could be very great.

2 Since wealth often leads to market power, e.g. via the financial capacity to corner a market.

usually quite low in poorer countries,[1] a large share of the total accrues in rents and payments to some form of capital.

The impact of the type of technology on functional distribution of income could be very great in principle. Unfortunately we do not know at this time in what degree the technically feasible range of factor intensities is curtailed by the working of market forces, such that in fact the mix of technology among countries with similar resource bases is not too wide. There is considerable fear that the use of too modern (i.e. capital intensive) technology will have a significant negative impact on income distribution, but no persuasive analyses of the possible magnitude of that effect have yet been presented. This factor may, however, be the second most important of those cited, so pending a better understanding of its role, its possible impact must be taken very seriously.

The processes by which growth and change occur in an economy have distributional effects which must be allowed for, together with the static aspects just listed. Distribution may not be the same in two economies which at a point of time have identical values of all real variables, if one is characterized

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1 This depends, however, on the relative scarcity of land, so the share in question may be fairly large in some African countries, for example.

by no change in either real or nominal values of variables, while the other is growing, suffering inflation or whatever. One of the major discussions, in fact, has dealt with the relationship between growth and distribution. A frequent proposition is that the growth process will, by its nature, tend to worsen distribution in the short run, but will eventually redound to the benefit of all. One variant of the argument is that, for capital formation and technical innovation to occur at a good rate, the rewards to entrepreneurs and risk takers must be substantial, i.e. they must reap most of the fruits of their initiatives. As this growth process occurs, therefore, distribution may worsen; more precisely, it will be more unequal than it would if the same levels of capital stock and technology were simply being maintained and comparable levels of initiative were therefore not necessary.

In discussions of the relationship between growth and distribution, several distinctions are important, both among hypotheses and between levels of discussion. One already cited hypothesis, backed by considerable empirical evidence, is that there is a normal U shaped relationship between levels of development and equality; very poor countries and rich ones suffer less inequality than middle income developing countries.[1]

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1 See, for example, Paukert or Ahluwalia.

This hypothesis is usually a static one, i.e. in comparing countries at different levels of development, it presumes that the level of inequality is affected by the level of development but not by the processes of change that a country may be undergoing.[1] The argument that the growth process generates inequality, independently of the absolute level of development, is a different one. To incorporate both types of relationship, one could hypothesize that, whatever the level of development and the associated level of inequality in a no growth situation, the faster the growth rate the farther will the level of inequality be above that of the no-growth case. A full theory would spell out also the effect of past growth on current inequality.

It is of course possible to argue that the no-growth relation between equality of distribution and level of development is positive, but that because of the dynamics of the process, as a country's growth rate accelerates its distribution will at first worsen, then improve, but always remain worse than no-growth economies at the same level of development (Diagram I).

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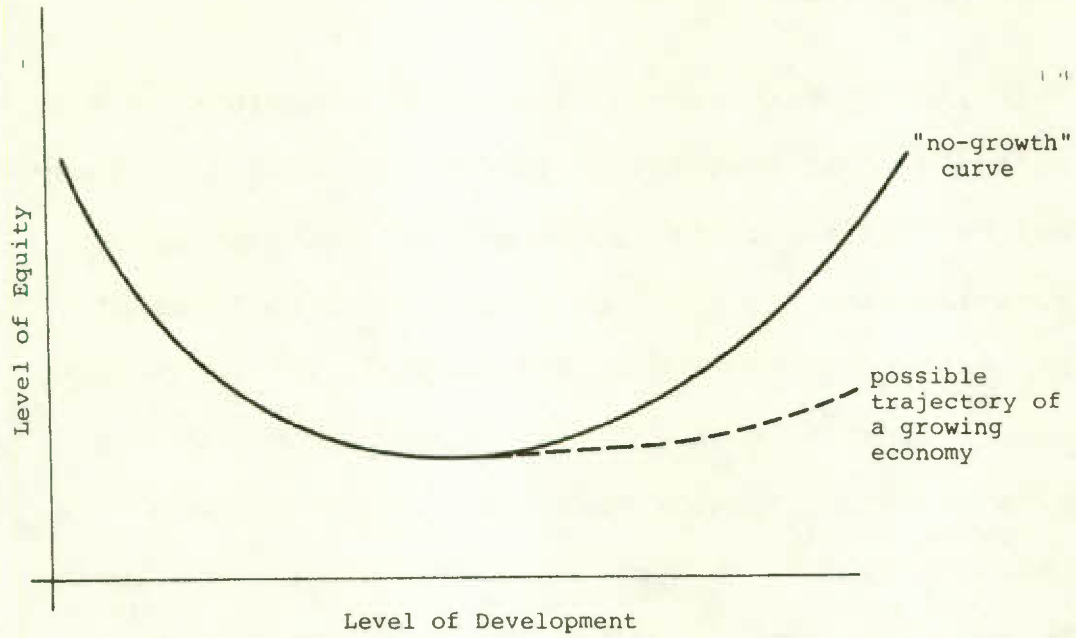
1 This implicit assumption is certainly not at all times warranted. On average the middle income countries may have grown faster than either the high or low level ones and, with the weight of the Latin American countries, they have certainly suffered more inflation. Still, it seems unlikely that these phenomena could account for all of the relationship observed.



The above discussion relates to the effects of growth on equality. A different dynamic issue is that of the causal ties from the level of inequality to growth. Here too there is a conventional wisdom to the effect that inequality will be positively related to growth, i.e., that it helps to promote growth. Though the details of the specific case may be pivotal in determining the growth-distribution relationship in any given country, there is nonetheless a set of broad hypotheses worth discussing at a general level. A convenient way to organize the discussion is to outline first a somewhat simplified general argument, to the effect that inequality promotes growth, made up of a set of specific propositions, each of which is considered in turn. The propositions are:

1) Total savings are a positive function of income inequality;

2) Total savings are a positive function of the capital share of private sector income;

3) Relatively modern capital intensive technology is more efficient than traditional labour intensive technology, and has the additional advantage of generating more savings since the share of income going to "modern" capitalists is higher. And "intermediate" technology, more productive than the traditional technology but less capital intensive than the "modern" Western technology, does not provide a way out of the dilemma because little of it exists, or it is too hard to introduce.

4) A class of rich capitalists facilitates investment and innovation since they are not forced to be as risk averse as less well backed persons. Accordingly technological advance is quicker when they control a large share of the investment funds.

5) In view of entrepreneurial risk aversion coupled with uncertainty with respect to the profit potential of various investments, most of which are socially desirable, inducements to investors in the form of low interest rates, tax exemptions and the like are promotive of growth.

6) For entrepreneurial potential to be fully realized it is important that the resulting private gains be substantial and that the business community have confidence that the rules of the game will not be changed often. Accordingly, changes for growth are better under a firm, rather conservative, government not devoted to too much social experimentation.

The historical evidence has not yet provided much understanding of the relationships between distribution and rate of growth, (in either direction), largely because the information on distribution is so spotty and difficult to build up. No obvious positive or negative association is evident from the few attempts to use data available for the last decade or so in a number of LDC's.[1] More intensive analyses of better data bases, which will gradually become available, may well bring to light some systematic links. A few model-based simulations have been used to address aspects of the problem. Cline, for example, analysed the impact of income distribution on growth through the savings rate, concluding that a more equal distribution would have a very minor negative impact on growth.[2]

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1 e.g. Ahluwalia, op. cit.

2 William R. Cline, Potential Effects of Income Redistribution on Growth, New York, Praeger Publishers, 1971.

Since he dealt with just one possible mechanism, and since savings data are weak in LDC's, this result is not conclusive. What seems to have emerged from the evidence thus far is that fast growth can occur with both quite unequal and fairly equal distribution of income; distribution is apparently not a dominant factor in the process of growth. It may be, though, that to grow under equality requires a different set of circumstances and/or policies than to grow under inequality.

Apart from the pace of growth itself, the other major dynamic factors which could have important distributional impacts are the level of inflation and the frequency, degree, and nature of economic shocks, such as those coming from the external sector and the agricultural sector. There seems a considerable presumption and accumulating evidence that inflation increases inequality, both by creating a wage lag and by lowering the return to those assets held by poorer families relative to that of those held by richer ones.[1] Permanently high levels of inflation eventually generate defense mechanisms, but it is not possible to generalize at this time on how much of the negative impact on distribution these can avert

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1 See for example A. Berry, "The Effects of Inflation on Income Distribution in Colombia": Some Hypotheses and a Framework for Analysis," in A. Berry and R. Soligo (editors), Economic Policy and Income Distribution in Colombia, Boulder, Colorado, Westview Press, forthcoming.

nor on how the learning process proceeds. Even less is known about the impact of shocks, which sometimes induce substantial movements of factors between sectors, erase wealth for some people and create it for others, and so on.

Effective prediction of how a given public policy or exogenous event will affect income distribution is considerably more difficult than the prediction of the effect of the same policy or event on output (total income), since it calls for more information. Modern economic analysis (e.g. the work of the last several decades) has given little attention to income distribution; in developing countries especially, the data are sparse and subject to considerable error. Equally serious is the need for a more general equilibrium approach to analyse distribution effectively than is the case with output. Many of the needed elements of the specification of general equilibrium systems are well beyond our understanding at present. The lack of confidence which can be placed in any particular set of assumptions constituting a general equilibrium framework has been increasingly recognized in the recent literature on distribution.

A more serious problem, possibly, relates to the fact that our understanding of the determination of the usually low income generated in the so-called "informal" sector is still so deficient that it is hard to believe that adequate specification can at this time be introduced in models, whether large or small. The past focus on the collection of data most useful in providing a good estimate of total output has meant that little attention has been given to measuring income and output in the low productivity sectors.

Hypothesis testing with respect to the mechanisms determining income distribution has been approached in a variety of ways. A distinction of some interest is that among:

a) general equilibrium models, of larger or smaller scale, which attempt to present an accurate enough reflection of the functioning of the economy to permit them to predict the impact of exogenous or policy based changes on certain variables;

b) ex-post attempts to relate observed changes in income distribution to exogenous events or policy changes;

c) partial analyses, following either of the above routes, but involving only part of the overall economy and therefore not pretending to analyse the total effects of changes in the independent variable(s).

It seems to the author unlikely that the first two approaches can provide us with an adequate understanding of the determina- tion of income distribution in the near future,[1] in which case the third category must remain the principal source of useful conclusions for some time, useful both in giving a better (though necessarily imperfect) feel for the implications of certain policy steps and as an input to the gradual improvement of general equilibrium analyses. Needless to say, the ultimate goal is a good understanding of the general equilibrium system.

Attempts to relate observed trends in distribution with policy or exogenous changes seem equally unlikely to provide convincing results. Identifying distributional trends remains a highly speculative and difficult exercise, and only major changes can be identified with much confidence in most countries. This approach can provide interesting conclusions when an apparently important structural change has occurred, since any substantial effects should not be lost in the confusion of other causal factors and statistical noise. But if one believes

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1 A prominent recent example of a large general equilibrium model designed to predict effects of changes in a variety of variables on distribution is that of Adelman and Robinson, (Irma Adelman and Sherman Robinson, Income Distribution Policy in Developing Countries: A Case Study of Korea, Stanford, Stanford University Press, 1978.)

that the most interesting issues with respect to the distribution of income involve policy steps whose distributional impact will not by itself be dramatic, then this is not particularly helpful. The most plausible hypothesis at this time is that only by a coordinated use of a number of policies can distribution be significantly affected. In short, although general equilibrium analyses are ultimately the appropriate methodology, they will probably contribute less than other approaches in the near future.

Further complicating the picture is the still unresolved issue of the relationship between growth, or various types of growth, and changes in income distribution. As long as there is any relationship at all, a policy's effect on distribution and on the welfare of the poor can be thought of as including both a direct effect and an effect working through its impact on growth. More generally phrased, one must consider both the short run and the long; results may be quite different as between them. Unfortunately, the growth-distribution discussion cannot soon come to any simple conclusions. For one thing, the historical record, even when it suggests certain systematic associations, is hard to probe for direction of causation.

All the above caveats must be borne in mind as we approach the discussion of government policy vis-à-vis income distribution.

B. Distributional Impact of Government Policies

It should not be surprising that, with the measurement of distribution being itself at a rudimentary stage, our knowledge of how it is affected by public policy is also little advanced. Certain "likely results" are gradually emerging, however, and even with respect to policies the direction of whose effects cannot yet be judged, it is often possible to make plausible guesses as to the possible magnitude of effects.

A given policy may have direct effects on both distribution and growth. Since growth itself may affect distribution (and may do so differently according to the type of growth occurring), a policy's effect on distribution may be best thought of as involving two components -- the direct effect and the effect through any impact the policy has on growth. The indirect effect via growth may of course be a lagged one. In this context the overall relationship between growth and distribution is important. In a setting where growth is likely to improve distribution, a policy with no direct redistributional effects may nevertheless be quite effective from a distributional point of view. As noted above, many students feel that there is a rather systematic relation between growth and distribution, i.e. that inequality increases in the early stages of development, then decreases.

It appears increasingly likely that in the real world distributional effects of policies can almost never be predicted on the basis of simple generalizations. There are usually special twists to the conditions of each country, to the way the policy is administered, and so on, which may be major determinants of its effects. Accordingly, in the brief review which follows, this qualification must be borne continuously in mind. While land reform obviously can improve income distribution, it may have the opposite effect under certain circumstances. Generalizations about the "usual" effects of a given policy can never mean more than that, for most of the interesting sets of assumptions, a particular result emerges.

Governments often think of certain policies as distribution-oriented or poverty-oriented and others as growth-oriented. Employment policies are sometimes viewed as related to an employment-distribution goal. While such classifications are in principle inappropriate (the total effects of each policy should be weighed in the balance and contrasted to those of each other policy), there are clear distinctions among policies according to their probable distribution and employment effects.

When they think of redistribution policies, governments tend to include land reform, progressive tax systems, public education and health expenditures, low cost housing, wage legislation, employment programs, and subsidized food programs. Whether in fact these are the policies with greatest potential for improving the lot of the poor is hard to judge, as are the possibly counteracting effect of other policies. A major problem with many of the policies listed (with the evident exception of land reform) is that the beneficiaries are often mainly urban. Subsidized food distribution usually falls in this category, and education and health services almost always reach the urban poor before the rural poor. Public housing programs usually do not benefit the poor at all, but families in the middle of the distribution.

Regardless of the actual impact of such programs on distribution, other public policies may have more striking impacts, especially in the long run. The main candidates are those which help to raise productivity in agriculture and other sectors, including agricultural policies benefitting the small farmer, credit and other assistance to small industry, and the like.[1]

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1 As Frank and Webb aptly put it:

> "Planning for redistribution, therefore, has much to gain from a joint examination of growth, stability, and distribution policies. Since a large part of the total policy impact on income distribution will usually consist of by-product effects of policies aimed at growth and stability, much of the opportunity for achieving a better income distribution will consist of improvements in the design of policies that are not primarily aimed at distribution. Also, the sensible objective is to attain some degree of <u>net</u> redistribution, not to ensure the maximum progressive impact of each policy instrument. Finally, if the principal distributive goal is to reduce absolute poverty rather than to narrow income differentials, then growth, as long as it entails <u>some</u> spillover to the poor, is not an alternative objective; it is itself an instrument, along with redistribution, for reducing poverty." (op. cit., p. 23).

Before considering some of these policies in turn, we should note that strong attempts at income redistribution towards the poor are in most countries inconsistent with the political power structure. Apart from cases where national elites replace foreign elites or one racial group taxes or expropriates another, leading to redistributions among the rich, or cases where socialist governments redistribute from the rich to the rest, governments are seldom interested in acting, or able to act, in ways which will significantly hurt powerful groups. What is done for the poor must be done at fairly low cost and without giving the appearance of hurting the power groups. These constraints limit the types of attacks on poverty likely to be made in developing countries. Even where skilled technicians are able to design good poverty-alleviation policies, many of these may be unfeasible due to lack of a general political will. Thus small farm programs tend to require a continuously supportive administration at various levels and for substantial periods of time to be successful. Most countries have a poverty-alleviation rhetoric, but where the nature of the problem is not too well understood this may play into the hands of the middle class or other groups. Public housing projects typically benefit this class although the rhetoric suggests they are designed for the poor.

Usually compounding political obstacles to strong anti-poverty programs are serious misperceptions with respect to the nature of the problem; these may lead well meaning people to adopt counterproductive policies. Although even the most careful analyses have not been able to demonstrate what are the best policies for growth with good distribution, it is often evident that certain types of protection of domestic industry, development of capital intensive activities, and the like are likely to be counterproductive. It is obvious that minimum wage legislation could be counterproductive from a distributional point of view. And so on. Any policy, like public housing or minimum wage legislation, which could be construed as positively redistributive, will be pushed as such by the middle class beneficiaries and the political figures who espouse it.

Potentially redistributive public policies in the economic sphere may be classified in a variety of ways. One useful taxonomy distinguishes:

(i) asset redistribution (including land reform);

(ii) fisal (i.e. tax and expenditure) policy; monetary policy;

(iii) regulation, including international trade policy (tariffs, quotas, etc), domestic price policy (price supports, price ceilings, etc), and other.

Some feel for the potential of specific policies falling in these broad categories can be obtained by consideration of the share of national income (including capital gains and losses)[1] which may be affected.

Asset Redistribution

Asset redistribution operates on the share of national income accruing to physical and financial (as opposed to human) capital. That share appears to fall usually in the range 35-55 percent.[2,3] It probably varies somewhat according to the economy's factor proportions, although this has not yet been documented. In the least developed countries the major assets are normally related to agriculture, with land and improvements

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1 As noted earlier, in the analysis of income distribution, the distinction between income from the current production process and income from capital gains loses relevance. There are some issues, though, as to whether all of net national income should be considered. That part remaining in the hands of companies may be thought of as accruing to shareholders or not. That part going into the government's hands should be included only if the benefits of government expenditures can be allocated among the population.

2 Here we adopt the assumption that undistributed corporate profits do accrue to the shareholders and that government income is also part of the relevant income base. Thus the total is national income plus net capital gains. Those gains, as a fraction of national income, probably lie in the range 5-10 percent in most LDC's.

3 Capital and labour shares have not been estimated for many LDC's. The paid labor share is calculated but the imputation of income of independent workers between labor and capital is important in countries where paid workers may be a very small share of the labor force. Rough guesses of these shares and of the importance of capital gains suggest the range indicated.

the main one. Livestock may be a major item. In more advanced countries, urban real estate and capital in manufacturing and commerce take on greater importance.

Land reform has been the main form of asset redistribution to receive policy attention. In poor countries land is a form -- often the main form -- of wealth, and is usable by poor potential recipients, since there are no economies of scale to speak of in agriculture. The fixed supply of land probably contributes to the feeling that it is acceptable to take some of this resource from those who have much of it and pass it to those who have little or none.

There is no question but that land redistribution can have a large impact on income distribution, though if attended by a great deal of conflict it may lead to some decline in output Frequently, output appears not to be affected much in the short run, and the incomes of the poor rise substantially.[1] Long-run benefits for the poor are not a foregone conclusion; results depend greatly on the specific situation. Where the reform is followed up by vigorous government support to agriculture, as was the case in Japan and Taiwan, the small farmers' incomes may continue to rise quickly after the direct impact of the land redistribution has occurred. Where the government is not

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1 As in the case of Bolivia.

supportive, as in Bolivia and Mexico, the land recipients' incomes may rise to a new plateau with the reform but change little afterwards. In each of these two countries, while the post-revolutionary governments either supported or permitted land redistribution, they did not see the reform sector as warranting large public support thereafter. In some countries where land reform is something of a political expedient that the government is pushed into, it then tends to withdraw general support from agriculture, the negative effects of the latter step then possibly outweighing the benefits of the land redistribution for the poor.

At the other extreme are cases like Taiwan and Japan. In both cases the public sector had a strong support system for agriculture, undiminished after the reform. In both cases output growth was rapid in the post reform years. It cannot easily be demonstrated that it was faster or slower than would have been the case in the absence of the reform, but it is clear that, with income rising both at the time of the redistribution and after it, the recipients were made better off.

Redistribution through the Monetary and Fiscal Apparatus

The potential for redistribution through government taxation and expenditures depends partly on political considerations and partly on economic ones like the administrative capacity of the system, the ease of taxation, etc. The government tax and expenditure system can, clearly, play a major role in a country's development path. Infrastructure is often important to growth, as are agricultural and other types of research, education, health, and so on. These sources of growth have, in turn, their distributional impacts. Although the distributional implications of the two sides of the budget cannot be treated as if they were independent, much information pertains to one or the other but not both, so it is convenient to discuss them separately, at least in part.

Monetary policy, defined broadly, affects distribution mainly in two ways. The rate of inflation may have significant effects. The allocation of credit and the terms under which it is conceded may also be important. In this latter respect it is widely believed that the benefits of formal sector credit are relatively concentrated due to banks' demand for collateral, their general preference for safe loans, and other features of their operating procedures.

It is more or less evident a priori that the tax side of the fiscal process cannot raise the incomes of the poor in developing coutries; a redistributional effect can be achieved only by taxing the rich heavily compared to the poor. Debate still rages on many questions of tax incidence, so there is much uncertainty as to the progressivity of many countries' tax systems. Incidence is often even harder to judge on the expenditure side of the budget than the tax side, although certain government expenditures do clearly benefit the poor, e.g. primary education, broad health expenditures, probably some types of agricultural research, etc. Fragmentary evidence from various developing countries does not yet permit any generalizations as to the overall distributional impact of public expenditures. It seems probable that it improves distribution in some countries and worsens it in others; what is clear is that it seldom plays even a substantial fraction of the major redistributional role which could be based on the use of 10-15 percent or more of the national income.

While the problems of measuring overall tax and expenditure incidence may be overwhelming, it is important to note that the incidence of some taxes and of some expenditures is less mysterious; accordingly it is not necessarily difficult to alter a system in such a way that the distributional impact is fairly definitely improved. To quote Bird and de Wulf, in their discussion of taxation and income distribution in Latin America:

> "probably few will disagree with the proposition that taxation in most Latin American countries appears to have done little to correct this initial inequality, both because of its relatively light burden in total in most countries and, more specifically, because of the apparent regressive or proportional nature of its incidence. We, too, do not disagree with what we take to be the major message of this line of argument -- that taxes have done and can do little to correct the distribution of incomes generated by the combination of imperfect markets and myriad interventionist policies that characterizes most Latin American countries. But we think the argument is both too optimistic in assuming that we know or can know what the burden of taxes is and, perhaps, although of this we are less certain, too pessimistic in ignoring the potential distributional effect of certain kinds of taxes in reducing the income, wealth, and power of the rich."[1]

Most wealth taxes and progressive income taxes (or consumption taxes) have fairly safely predictable incidence, if applied seriously.

The political difficulty of achieving a large redistributional effect from the fiscal process naturally reflects the political clout of the wealth. Willingness to pay taxes is low where they are not part of a tradition, and evasion is facilitated by poorly paid bureaucrats. Further, there is the problem

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1 Richard Bird and Luc De Wulf, "Taxation and Income Distribution in Latin America", IMF Staff Papers, 1975, p. 676.

that many people high in the income distribution do not at all view themselves as rich. Bird and De Wulf note, for Latin America:

> "A serious problem with the more intensive use of the tax system for redistributive purposes is that, while income in Latin America is so unequally distributed that there are, by anyone's standards, a great many poor people, there are only a small number of rich people by relative national standards. This is not a mere play on words. The point is that the average incomes and consumption standards of those at the top of the Latin American pyramid, while much higher than those at the bottom, are in general only roughly equivalent to the average levels prevailing in the developed countries. There are, of course, some wealthy people in most countries, but it seems nevertheless true that most of the relatively rich in Latin America appear to consider themselves to be middle class, the middle class to be poor, and the poor to be virtually non-existent. The cosmopolitan perspective from which professionals and other members of this upper-income group tend to view their relative position in the world is at least a partial explanation for the apparently widespread existence of this truncated perception of the national distribution of the good things of life. Combined with the political dominance of the (relative) well-to-do in Latin America, this fact is perhaps more than sufficient to explain why few efforts, and even less success, to redistribute income and wealth through the fiscal system may be noted in most countries. Those who feel that they are middle class and overtaxed will not be much moved by studies that categorize them as the lightly taxed rich. Tax burden studies must therefore look for their justification elsewhere than in their alleged influence on public opinion.[1]

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1 Bird and De Wulf, op. cit., pp. 676-77.

The varying difficulty in achieving a positive distributional impact from government expenditures is exemplified in the fields of health and nutrition, natural candidates as potentially good areas for such expenditures.

> "The problems encountered in attempting to increase benefits to the lowest income and rural groups differ substantially in the two areas of nutrition and health. In the health sector, where maldistribution of facilities and personnel seems to be the overriding constraint, considerable opposition can be expected from medical professionals -- who are largely drawn from and represent the interests of the upper-income, urban elite -- to major attmepts at reallocation of resources. The example of Cuba is instructive in this regard. Prior to the revolution in 1959, the public health sector was weak and poorly coordinated, although the quality (by professional standards) of the Havana-based private practitioners was high. With the change of government, however, a strong national health service was created with broader responsibility to the population as a whole; private practice was discouraged; and facility construction and expenditure was oriented toward rural areas. In the course of

three years, half of the medical doctors emigrated to the United States. They were quickly replaced, however, and the total number of physicians increased shortly thereafter.

Nutrition programs are at an advantage, in this regard, with less potent vested-interest groups to tackle. Nonetheless the political orientation and power base of the government may limit the extent to which nutrition programs aimed at the poor are acceptable.[1]

All such programs must run the gauntlet of bureaucratic malfeasance, and the quality of the delivery system is as important as their basic acceptability. But it does appear, from the experience in India, for example, that food distribution systems for the poor can have a role to play. So can the encouragement of production of those food items which are or should be heavily consumed by the poor.

Education Policy

As development proceeds, the share of national income accruing to persons with considerable education or complicated skills increases; much of this "human capital" is directly or

1 Olav T. Oftedal and F. James Levinson, "Equity and Income Effects of Nutrition and Health Care" in Frank and Webb, op. cit., pp. 426-27.

indirectly associated with the educational process.[1] The variance in educational level across individuals appears to become increasingly powerful in explaining the variance of income as the level of development rises, at least up to middle levels of development. Some of the observed correlation in developing countries between level of income and level of education is presumably due to the positive effects of education on productivity, some to employers' use of education as a screening device among job candidates, some to a positive correlation between education and non-economic determinants of how good a job one gets (e.g. where racial discrimination or family favoritism exists), etc. Each of these relationships is presumably dependent on the structure of the economy, some aspects of which are also likely to be affected, jointly with the distribution of education, by underlying aspects of the social structure. What part of the often large share of income variation which educational level can explain statistically is due to a causal relation from education to income, and how stabl such relations would prove under marked changes in the distribution of education, is not yet clear.[2]

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1 Learning by experience is another source of such capital. It may be more important for persons with more education; at least their incomes tend to rise more with years of work.

2 In the latter regard, if the substitutability of different skills in production were fairly high, one would expect changing relative supplies of different types of labour to lead to changes in income differentials by level of education, for example.

From a technical viewpoint there is no question but that, in a country starting with a highly unequal distribution of education, public policy can affect the distribution of income, especially in the long run, and a major source of inequality can be substantially curtailed. For the short or middle term, and given the normal range of redistribution of education which a government can manage, the prediction of the effect on inequality becomes more complicated and even its direction depends on the elasticity of substitution among different levels of education. These are extremely difficult to estimate statistically. A number of attempts have emerged, mostly with high estimates -- suggesting that, when a given level of education is expanded, the total income of people at that level increases. But little confidence can be placed in such estimates at this point.

Expansion of primary education would be, under the assumption just cited, the best policy from a distributional point of view. In order to improve the distribution of education, the gains of poorer families must be faster than those of the better-off families whose children finish primary or secondary and higher levels. With the rapid expansion of these latter, many countries have not witnessed improvements in the distribution of human capital based on education even where creditable expansions of primary schooling have occurred. Still, distribution would have worsened in the absence of these expansions.

The short and long run effects of any educational strategy must be distinguished. Thus a rapid expansion of primary schooling should improve the distribution of income for the cohort currently of school age; at the same time it may lower the income of the uneducated in older cohorts, leading thereby to a lowering of the income share of what may at present be the poorest group. This negative effect may not show up in the family distribution, however, since the losers may have children who are gainers.

Evidence from developing countries that primary education frequently has a high rate of return,[1] and that education in general is an important factor in social and economic upward mobility, supports the argument that educational strategy must be a key component of any long run income distribution policy. In quite underdeveloped countries the "education share" of national income may be as low as, say, 10 percent, while in middle income countries like some of those in Latin America it can reach 40 percent or more. Evidently, level of education is associated with the determination of who receives a substantial slice of national income.

Frank and Webb have argued that

> "... in those countries where society places a high value on education, such as Korea and China, the population quickly becomes highly

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1 e.g. Martin Carnoy, "Rates of Return to Schooling in Latin America", Journal of Human Resources, Summer, 1967.

> literate and well educated, even at low levels of development. Widespread educational attainment prevents the emergence of large wage and salary differentials based on acute shortage of skilled and educated manpower".[1]

Regulation, Including Trade Policy

The most common trade policy intervention is the protection of domestic industry. Most LDC's export primary products, either agricultural or mineral. Agricultural products are fairly frequently produced in labour intensive ways, mineral products less frequently. The existence of a primary exports-manufactured imports type of trade is most likely to improve income distribution (a) if the exports are labour intensive, if the capital used in their production is widely owned, and if the goods and services whose production is displaced by imports have the opposite characteristics or (b) if the government appropriates considerable income as a result of the trade and its expenditure have positive distributional effects. The conditions listed under (a) are best approximated when the exports are mainly from small scale agriculture. Mineral exports usually generate income in a very concentrated form, so only if the government appropriates a large share of such income is it likely to be at all equitably distributed.

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1 Frank and Webb, op. cit., p. 8.

Even where the government does appropriate large amounts it is uncommon for a large share of the revenues so generated to pass easily to poverty alleviating uses. But with a moderately responsive political system, the share so used may still be higher than if the exports were, for example, from large scale agriculture.

Whatever the distributional effects of the traditional trading pattern of most LDC's, those of the import substituting industrialization which gradually weakens that pattern are generally expected to be negative. This prediction follows from (a) the relative capital intensity of most domestic industry, which is protected, (b) the monopoly profits likely to be generated by such industry, especially in countries too small to sustain a number of firms producing the same item, and (c) the probably high concentration of gains resulting from access to bureaucratically distributed rights, e.g. to import licences. Depending on the circumstances, import substituting industrialization (ISI) could improve distribution if the previous export regime was such as to concentrate incomes and if the just cited "usual" characteristics of ISI were not extreme. In fact, such a result seems unlikely, though. Protection is determined through a political process which usually helps to assure that it will favour large scale producers, who are almost always fairly capital intensive.

"As Bruton argues, an inward-looking, import-substitution strategy often involves protection for the urbanized, modern sector of the economy at the expense of the urban and rural poor. Controls and quotas on imports and investments create monopoly rents which accrue to the wealthy. Protective tariffs and import controls enable techniques to be used which are highly capital-intensive but inefficient and much higher wages to be paid to the highly organized elites in the modern sector. In India, such effects have been reinforced by government policies that have kept the prices of energy, raw materials, and refined metals charged by both public and private-sector producers comparatively low, in effect subsidizing the modern sector industrialists."[1]

The hope that non-traditional exports would create a lot of employment and help to raise the wage level in many LDC's has been expressed recently by a number of authors,[2] mainly on the basis of the experience of Taiwan and Korea. It is unlikely that the income distribution of the typical LDC can be significantly affected in this way, however. Production of manufactured exports is usually carried out by relatively large firms which in turn are of above average capital intensity. Only if there is considerable accompanying growth of smaller firms would a positive distributional impact be expected. If

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1 Frank and Webb, op. cit., p. 9.

2 e.g. Ranis, et. al.

the exports grow enough they may raise wages by sopping up the surplus labour, but this is then an effect of growth itself, rather than of the type of growth.

Almost as ubiquitous as protection as a part of an ISI strategy are investment incentives to manufacturing.

> "In almost all instances the incentives are in terms of exemptions from company taxes or from customs duties and include measures that may reduce the level of taxable income (at least for a time), e.g., accelerated depreciation and investment allowances. The latter are less frequently found and result essentially in deductions of part of the cost of investment from taxable income..."
>
> "Efforts to measure the effect on the rate of investment of incentive systems have not been successful, but qualitative evidence is leading an increasing number of economists to conclude that any such effect is minor. This evidence is largely from reports on interviews with producers and from studies in developed countries of the determinants of investment. Answers to questionnaires on this kind of issue are not completely reliable, but the consistency with which tax advantages are downgraded appears convincing."

"From the standpoint of employment growth and allocation decisions, the worst of all worlds is the situation where the rate of investment is not affected, but the choice of techniques and choice of sector are affected in a manner that penalizes employment growth of unskilled workers, discourages the use of domestically produced inputs, and discriminates relatively against small-scale operations. This in fact seems to be the case in many countries at the present time. There are other consequences more directly related to the distribution of income that may be worth discussing in the present context."[1]

"A second aspect of investment incentives relevant to employment and income distribution follows from the fact that in many countries the incentives apply only to certain types of activities, otherwise additional government authorizations are necessary. For example, imports of capital goods may be exempted from duty, but an import license must be obtained. The retaining of considerable discretionary power requires consideration of criteria for deciding which activities or imports to allow. One such criterion that has found

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1 Henry Bruton, "Industrialization Policy and Income Distribution", in Frank and Webb, op. cit., pp. 92-93.

favor in a number of countries is whether or not there is "room" for an additional producer. This usually means that the decision-making authority asks itself what would happen to product prices and to the utilization rates of existing capacity if new capacity were to become available. (If such consequences appear undesirable from the standpoint of the existing producers, new applications are rejected.) Under this arrangement the new industry is offered not only protection from imports but also protection from future domestic competition. As is discussed more fully below, this kind of protection has especially adverse effects on the kinds of productivity and employment growth that help reduce the proportion of the labor force left beyond the reach of the modern sector. It is evident that such an incentive provides more or less guaranteed profits without any inducements to find and install cost-reduction measures. Evidence seems completely lacking on this point, but it may well be that removal of guarantees of protection of this kind would have marked negative effects on the rate of investment in some countries, especially in those activities where exporting potential is assumed to be slight."[1]

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1 Bruton, op. cit., p. 94.

Regulation and Government Purchase

All countries apply various types of regulations on economic units. Licencing procedures, price controls, etc. fall in this category. In some countries the public sector, including semi-public organizations, plays a significant role in the economy and its mode of doing business can be important. Such procedures generally constitute one of the less obvious sources of disparities in the distribution of income.

Monopoly profits can be substantial in LDC's; they result from a combination of small domestic markets (so that economies of scale may permit only one efficient sized firm), high tariffs, and legislated monopolies (where firms require permission to produce). They go almost by definition to relatively well-off people. Discretionary buying by public agencies is likely to have the same effect; partially freed from market pressure to minimize costs, members of that sector can afford to favour producers who bribe them or otherwise make it worth their while.

To prevent competition among firms from going beyond the normal "economic" (and presumably salutary) forms, there are regulatory agencies and the legal system, designed in principle to protect the victim of unfair practices (which may range from something as innocent as short run price cutting to something as nasty as sabotage). Development of such protective devices is often retarded, and the small firm especially may be victimized with frequency. There is increasing recognition that market imperfections, either introduced by governments (e.g. licencing) or not prevented by them (e.g. sabotage), usually work against the weaker, smaller producer. Since these are more labour intensive than are larger firms, and since the capital income from them accrues to less wealthy people, the impact of such failures in the system of justice on income distribution must be presumed to be negative.[1]

Population Policy

Although its short run distributional impact may be small, the long run importance of population control in the alleviation of poverty can hardly be exaggerated. The normal concomittant of poverty in LDC's is a low marginal product of labour and low labour incomes. This is a direct result of a small stock of natural resources and capital per person. Until the ratio of other resources to people increases, poverty alleviation cannot be put on a solid foundation. Phrased another way, equilibrium wages can only rise when the labour surplus is terminated. Depending on the country, it may be possible to increase the supply of complementary resources fairly rapidly; but this is not always true. In any case, it is hard to conceive of any

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1 There are, of course, many counter examples. Some poor people default on credit, or engage in petty theft, etc. But lower income people as a group are probably losers on balance from the imperfect control of crime/application of justice.

other single policy which in the course of two or three decades could have as positive an impact on the incomes of the poor in populous countries like Bangladesh and India as a decrease in the annual population growth rate of, say, 1-2 percent age points.

In recent years there has been a significant expansion in the number of countries with official policies to reduce population growth rates or support family planning activities for other than demographic reasons. This reflects, among other things, an increased awareness that development plans have been frustrated by rapid rates of population growth, which not only impede the attainment of higher levels of per capita (and perhaps aggregate) income but frustrate the accomplishment of almost all other goals, such as improvements in nutrition, education, and health of the population.

While population policy as currently practiced probably has only a small impact on the rate of growth of Third World population, the above indications suggest that it may be of increasing significance as time passes. And, fortunately, it seems to be an area in which the negative impact on income distribution is fairly apparent, i.e. common sense is not counter-intuitive. While there are many other sources of opposition to a population program, bad economics is not likely to be one of them.

Labour-Intensive Public Work Programs

For many years a frequent recommendation for labour surplus countries has been the use of excess labour on projects of public intrastructure. But, as Lewis observes: "on various occasions and in various modes during the past two decades many developing country governments have experimented with the approach; and in most cases the results have not appeared particularly successful."[1] While these apparently unreassuring results have pushed this policy well down the list of those in which hopes of strong redistributional effects are placed, Lewis argues that: "a 'serious' public works effort can have quite powerful redistributive effects -- mostly of the intended kind."[2]

Despite this, almost all past efforts have been minor relative to the antipoverty task.[3]

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1 John P. Lewis, "Designing the Public Works Mode of Anti-Poverty Policy", in Frank and Webb, op. cit., p. 332.

2 Ibid., p. 332.

3 "Of the 14 most prominent country cases included in the study of the Harvard group for the World Bank, only one is estimated to have claimed a higher fraction of gross domestic product than 1 percent; five claimed less than 0.5 percent. Of these countries, only one (Tunisia) generated more than 10 man-days of employment in public works per member of the labor force. The marginal contribution of most others was less than five man-days per member of the labor force. And these are the major ventures. For the most part rural public works initiatives, except for occasional spasms of hastily contrived and quickly abandoned relief works in response to natural disasters, have been exercises in the trivial." (Lewis, op. cit., p. 343).

Lewis suggest that: "additive public works efforts are unlikely either to represent serious attacks on the low-end poverty need or to be locked into leadership's priority spectrum until they claim (or are rapidly approaching a claim of) 1 percent to 2 percent of a jurisdiction's total output and income. This would mean, of course, a correspondingly higher fraction of the jurisdiction's governmental budget, and a higher fraction still of develop- mental outlays."[1]

It is evident that the redistribution and poverty amelioration effects of public works depend on the projects; if they are labour intensive in the construction stage and if the benefits of the asset accrue substantially to the poor these goals can be achieved. So the major question is how it can be best assured that such projects will be found and implemented on a large scale. Lewis argues that the main problem is not a lack of good investment possibilities but rather the lack of an institutional framework. Considerable decentralization is likely to be required, yet it places the programs in the bailiwick of the usually "least reformed" local elites. The potential role of foreigners is small.

Public works programs have greater potential in the poorer, still mainly agricultural, countries, and it seems possible that in these instances they could be one of the main policy

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1 Ibid., p. 344.

hopes for poverty alleviation. Unfortunately, the attempts so far have been too few and too small to constitute a real test of this proposition. It appears also to be the case that

> "The advanced economies have little expertise to provide on this subject that is relevant, is easily transferable and grows out of their own experience. If the experiments are as large and decentralized as here suggested, it would be nearly impossible for any small cadre of expatriate technicians or advisers to relate to the program's operating level effectively. The program would be peculiarly enmeshed in indigenous institutional complexities, which are hard for expatriates to comprehend and upon which they intrude with little grace. Most especially is this true of the conflicted domestic politics which, if the present analysis is correct, will lie at the core of most redistributive public works strategies.
>
> Hence poor countries adopting the approach are going to have to figure out their own answers to the questions that have been raised in these pages. And the most productive transnational dialogue on the subject will be within the Third World itself -- among governments and institutions of countries that opt for serious experimentation. The main contributions that external actors can make to the effort will be the form of concessional transfers either of finance or of food."[1]

1 Lewis, op. cit., p. 335.

Policy On Wages And Unions

Because of the possibly complicated general equilibrium effects of wages determined by legislation or affected by union bargaining power, our understanding of the influence of these phenomena on income distribution is very incomplete, even in developed countries. The conditions under which they could have important effects and the nature of such effects have received considerable theoretical analysis. But the needed empirical information is seldom available.

It seems that in general the relevance of minimum wage legislation (MWL) is enhanced in relatively poor countries where many workers fall in the unskilled category; at the same time such countries often have only a small share of the labour force as paid employees. At later stages of development, this latter share rises and skill differentiation becomes more important and usually union power also rises.

In terms of wage policies Webb has distinguished "three main approaches which can be described respectively as (i) the low-wage policy, (ii) the industrial consensus approach, and (iii) the pro-modern-sector labour approach aimed at evolutionary political radicalization. Contrary to most preconceptions, high-wage policies aimed primarily at redistribution are the exception. Each of these approaches is consistent with particular economic settings and political priorities. Elements of each may be found at any one time in a given country. The combination of a pluralist government with a policy that can be implemented through several instruments lends itself to confused political sharing, where each view regarding that policy can appear to be satisfied to some extent -- like a boat with several rudders being steered simultaneously by several captains. Policy intent is easier to define when only one major instrument is available. Thus, there is no such easy way of appearing to satisfy opposite views on the relative priority of mass rural schooling; the schools are either built or not.

> "The ambiguity of labor policy results from the variety of instruments that are relevant to wage levels and that may easily operate in conflicting directions. Ambiguity also results from the continuous nature of labor policy-making: wage levels are being decided continuously by the joint influence of market and government forces so that governments can easily modify, and even reverse over short periods, the intensity and direction of their intervention, especially, of course, in inflationary environments. Finally, complications arise from the dual function of wages -- they are simultaneously a distributive objective and a key instrument for other objectives such as stability and overall growth."[1]

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1 Richard Webb, "Wage Policy and Income Distribution in Developing Countries", in Frank and Webb, op. cit., p. 219.

Before generalizations will be possible on the relationship between wage policy (or union power) and income distribution, additional information will be necessary on

(a) the wage elasticity of demand for labour in the sector where MWL is applied;

(b) the indirect effect on other wages or earnings;

(c) the relationship among individuals who gain and individuals who lose as the result of wage policy -- i.e. the question of whether gainers and losers tend systematically to come from the same or different families.

It might be argued that MWL is of little significance since paid workers whose earnings it determines are only a few percent of the labour force, and its impact on other earnings is small. But if the share of workers covered was higher, if the elasticity of demand for their services was low, and if other earnings were pulled up in emulation, the distributional effect could be substantial and positive. Clearly it could also be negative.

Evidence, especially from some African countries, seems to suggest a substantial possible effect of MWL. Berg argues that "The reasons for the existence of wage levels, especially for unskilled labour, which are 'too high' are mainly institutional. In some countries, and at certain periods, trade unions play some role. But the major factor is the government policy, and the ideological or political ideas which guide it. Government is a major influence on wage levels and structure in most LDCs, by its wage decisions with respect to government employees, and in its role as regulator through minimum wage policies, wage boards, Industrial Courts, etc."[1] That government wage policy can be important is certainly suggested by the experience in Ghana (see Appendix B)[2] where the sharp decline in real wages brought by inflation suggests a previous real wage level well above market clearing levels and, correspondingly, indicates the considerable impact of government determined wage levels. In some countries, policy may have smaller scope.

Webb believes that: "It is both statistically and conceptually difficult to separate the contributions of policy, unions, and market structure. Today's market structure and union strength are both partly the product of yesterday's policies. In this broader sense, much more can be attributed to policy. But today's wage decisions and mediation in wage disputes only rarely push wages very far above, or below, their market (including union) determined level. This suggests that a policy reversal will be a slow and complex process because

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1 Elliot Berg, "Wages, Policy and Employment in Less Developed Countries", paper presented to the Conference on Prospects in Employment Opportunities in the Nineteen Seventies (University of Cambridge, 1970), p. 5.

2 The availability of the appendices is indicated in a footnote on page 26.

it must, in turn, unwind the fabric of protective labour and business laws that are now part of the market environment in most LDCs, and that largely explains wages that are "too high."[1]

Macroeconomic Policy and Inflation

The relationship, if any, between inflation and income distribution cannot be predicted on the basis of any simple theoretical model. It is likely to depend mainly on market imperfections and, more generally, on the details of how markets, especially the labour market, work. Price increases may affect the real wage in a wide variety of ways, depending both on market structure and on the relevant socio-political institutions. The almost worldwide inflation of the 1970s has coincided with decreasing real wages in many countries, raising the definite possibility that at this time inflation has a worsening effect on distribution of income in many countries.[2] Ghana and Bangladesh, among the countries studied intensively in the appendices[3], seem to have been characterized by this combination of events. It remains to be seen in each individual country whether the decline in real wage is the result simply of a price-wage lag, in which case the real wage should return to its former level (or rather to the level it would have attained in the absence of the inflation) when the rate of price increase returns to its earlier lower level. An alternative hypothesis, however, is that many wages had been pushed above their equilibrium levels

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1 Webb, op. cit., p. 236.

2 See, for example, Albert Berry, "The Effects of Inflation on Income Distribution in Colombia: Some Hypotheses and a Framework for Analysis", op. cit.

3 The availability of the appendices is indicated in a footnote on page 26.

prior to the inflation and that its presence essentially permitted them to move towards equilibrium. A variant of this interpretation would be that in many labour markets there is a substantial range of outcomes which are acceptable to both the employer and the employee, and that the determination of where the wage rate falls within this range depends on such factors as the rate of price increase.

In some countries it appears that the recent waves of inflation have been as much as anything else a reflection of a scarcity of goods and services; in those cases the inflation may simply have been the vehicle which brought about an essentially unavoidable decrease in the real income of various (or possibly all) groups in a society. But the more frequent case, probably, is that in which the inflation has been mainly the result of a fueling of aggregate demand by monetary and fiscal policy. When this is so, it appears that the inflation may bring about decreases in the real incomes of some groups, such as wage earners, which were in no sense inevitable. If one believes, as many students of the African economies do, for example, that government policy can play an important role in the determination of real wages for large groups of workers, then it follows that those real wage levels can be substantially affected by inflation if they were previously towards the upper end of the range within which they could be set.

While much more study will be required to throw light on the relationships under discussion, there is at present the definite possibility that the management of macroeconomic policy can be a major if not the major determinant of income distribution, at least among the tools over which the government has reasonably good control.

C. Possible Distributional Effects of Foreign Aid: Some General Considerations

Foreign aid is used to raise a country's investment or its consumption, so its direct impact on income distribution depends on the type of investment which results and/or on whose consumption is raised. Viewed another way, the distributional impact of foreign aid depends partly on how the government wants to use additional resources made available, partly on the specific uses to which the aid is formally targeted and partly on the fungibility of funds made available. Since aid often has conditions attached, it may have less obvious impacts on income distribution, impacts related to the nature of the conditions and the way the government responds to them. These may be positively or negatively redistributive.

In general it is perhaps arguable that the final distributional impact of an aid program targeted at the poor is weakened by fungibility of funds. But there are exceptions when an innovative program leads the government to multiply it, or when matching fund conditions pull domestic resources in the same direction as the foreign ones. At present there is no strong general evidence on any of these points; it is reasonable to presume that foreign aid can and does affect income distribution, i.e. that with respect to the goal of poverty alleviation, foreign assistance can have an impact. In many countries, certain types of programs likely to benefit the poor are not high on the government's list of priorities, e.g. rural integrated development programs in poor regions, rural health programs, etc. Financial assistance and, sometimes equally or more important, technical assistance from abroad can be important in the execution of such programs.

In the earlier days of the multilateral agencies like the World Bank, conditions (written or unwritten) were frequently of a somewhat conservative nature, e.g. involving a preference against land reform. Some of these favored inequality of income distribution. More recently the stance of most of these entities has come to reflect much more concern with income distribution. As early as the mid 1960s USAID was pressuring some governments in the direction of land and tax reforms, both of which would be expected to have positive distributional effects.

Since most LDC governments are in practice conservative in terms of their stances on income distribution, the international agencies' conditions do sometimes push in a positive direction. Such indirect (though conceivably important) effects are not our concern here, since Canada's bilateral program is not of such magnitude as to give her much leverage over domestic policy making in many LDC's. Her role in consultative group deliberations on such matters may be significant, but is hard to get at.

An impressive case could be made that during the period through the 1960s foreign aid in general (excluding food aid) had the effect of worsening income distribution in most recipient countries, at least in the short run. Political conservatism was one factor. Another was the prevalent belief in economies of scale, which led most loan activity to focus on large farmers, large scale industry, capital intensive engineering designs for infrastructure, etc. This may or may not have been good for growth, but its distributional impact was almost certainly negative. The focus on large projects was induced also by the relative facility of moving funds this way, especially for highly centralized agencies like the World Bank. The role of politics in the aid process -- more evident in the regional banks -- often leads to projects which benefit political friends of the bank members arranging the loans; those friends normally come from the wealthy class.

Through the 1960s, a large share of aid went to infrastructure, whose effects on income distribution are particularly hard to gauge, due to the complexities of its linkages to developments in other sectors. Much of such aid appears open to the criticism that major roads were favoured over minor ones, that power developments helped the modern sector but not the traditional sector, and so on. It is undeniable that had superior ways of building infrastructure been available they would often or usually have been missed due to the inflexibility with which western trained technicians viewed the alternative designs. When domestic technicians are not available or have studied in developed countries, this problem may be unavoidable. The fear is that the bias in question leads systematically to unnecessarily capital intensive ways of doing things, thereby contributing to a bad income distribution. But the fear is harder to demonstrate in the area of infrastructure than in some others, so during the period of "aid mainly for infrastructure", the presumption that non-food aid worsened distribution is only moderately strong.

The mechanisms of aid giving often contribute to undesirable capital intensity. The practice of funding only the foreign component of projects may lower the opportunity cost of imports of inappropriately capital intensive equipment. It may already be too low if the exchange rate is overvalued. Bureaucratic caution often argues against untried alternatives, and to the aid agency operative or consultant "untried" often means "non-developed country". Among the more dramatic project failures are many where it becomes evident ex post that the technology is too advanced for the country. Modern technology is thus no guarantee against clear cut failure, but many decision-makers tend to view it as such.[1]

In the last 5-10 years, income distribution and employment have been increasingly incorporated as goals of economic policy in LDC's. Attention has moved to small farm programs, lower levels of education, and so on. And the conditions for which aid agencies pressure have also become more distribution oriented. Rhetoric naturally moves ahead of action and projects are in the pipeline for several years, so one would not expect to see much (if any) impact on world income distribution this early Most international bureaucracies find the new objectives quite hard to work with, just as most governments do, so it is unlikel that progress will be rapid. Most governments have so little accumulated experience in dealing with the poor and in finding ways to raise their productivity that it is unrealistic to expect quick results. Efforts must be measured mainly by whether the search for solutions is proceeding in the right

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1 Here the distinction between apparent failure and real failure may be very important. A technology which simply won't work is evident to all as a failure; one which works but whose benefits are in fact less than its costs may not be publicly defined as a failure, and hence may not threaten any bureaucrat.

direction. In this respect a number of countries are taking plausible steps and international agencies like AID, M.O.D. and the World Bank have restructured their programs somewhat. The final results remain to be seen. It may be that, even at its best, aid cannot have significantly positive effects on distribution, due to some of the constraints and features cited above. A strong effort to improve those effects could, however, make the difference between a quite negative impact and a netural one; and this may be quite important.

III Impact of Canadian Aid on Income Distribution

A. Allocation of Aid by Country and Its Distributional Impact

The extent to which aid reaches very poor people depends both on the countries to which it is directed and on whom it reaches within countries. Judged by absolute standards like levels of food consumption, life expectancy and the like, the great bulk of the world's poor are in the populous countries of Asia, with substantial numbers found also in Africa and less in Latin America.

Pending a better understanding of the distributional implications of the growth process, there is not much to be said on grounds of distribution in support of aid to the middle income countries of Latin America, for example, unless there is reason to believe the benefits will accrue mainly to people towards the bottom of the distribution. Such aid may, of course, be justified on other grounds, but we do not consider those here.

The bulk of Canada's bilateral aid has gone to the poorer countries of Asia and Africa. Countries with per capita income of less than 200 1973 U.S. dollars received over 71 percent of allocable disbursements in 1973-76 (Table 1) as compared with 67 percent in 1970-73. The share going to the 20 least developed countries was raised from 3.95 percent in 1970-71 to

15.66 percent in 1975-76.[1] Meanwhile there has been an increase in the share of total foreign assistance passing through multilateral channels, from 24 percent in 1970-72 to 31 percent in 1974-76.[2] A substantial share of total aid (25 percent in 1975-76, for example) has been in the form of food, some going through bilateral and some through multilateral channels.

The non-food bilateral assistance includes project assistance, commodity aid, and lines of credit, with the first category the major one.

B. Effects of Aid within Countries

In the case of Canada's aid, it is helpful to distinguish food and other aid, bilateral and multilateral aid, and within bilateral aid, the types of programs and projects financed.

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1 Ibid., p. 29.

2 CIDA, Canada and Development Cooperation, Annual Review 1975-76, CIDA, December 1976, p. 123.

TABLE 1

Bilateral Disbursements of Canadian Aid, by Region and by Per Capita Income of Recipient Countries, 1970-71 to 1975-76

	1970-71	1971-71	1972-73	1973-74	1974-75	1975-76
Per Capita Income Less than $200 U.S. (1973 Dollars)						
Asia	165.49	142.37	165.17	199.49	234.18	253.12
Francophone Africa	7.32	16.99	18.81	20.85	47.48	40.27
Commonwealth Africa	7.17	10.62	11.79	27.28	61.38	50.58
Commonwealth Caribbean	--	--	--	--	--	--
Other Latin America	--	--	--	.15	1.34	2.90
Total	179.98 (70.33)	169.98 (67.33)	195.77 (63.12)	247.77 (70.66)	344.38 (73.3)	343.97 (70.57)
Per Capita Income $200-375 U.S. (1973 Dollars)						
Asia	1.03	.64	.37	.46	.43	.28
Francophone Africa	11.32	14.52	14.36	17.00	22.80	27.04
Commonwealth Africa	13.72	26.16	36.86	30.92	31.22	33.96
Commonwealth Caribbean	2.73	1.63	1.69	1.13	1.56	2.85
Other Latin America	.11	.35	.60	1.00	4.60	3.72
Total	28.91 (11.30)	43.30 (17.25)	53.88 (17.37)	50.51 (14.40)	60.61 (12.90)	67.85 (13.92)
Per Capita Income More Than $375 U.S. (1973 Dollars)						
Asia	13.31	4.89	8.85	3.31	6.85	1.65
Francophone Africa	11.05	13.33	25.44	22.87	25.94	33.16
Commonwealth Africa	.87	1.60	2.28	2.62	4.54	7.13
Commonwealth Caribbean	13.32	10.94	12.52	12.74	13.86	13.82
Other Latin America	8.46	8.44	11.42	10.88	13.75	19.83
Total	47.01 (18.37)	37.70 (15.02)	60.51 (19.51)	52.42 (14.95)	64.94 (13.82)	75.59 (15.51)
Grand Total	255.90	250.98	310.16	350.70	469.93	487.41

Source CIDA, Canada and Development Cooperation, op. cit.

Note: Figures in parenthesis are percentages of allocated total for the year.

Food Aid

In principle food aid can clearly have relatively good distributional effects. When it is used in situations of severe shortage it should have the desired effect of helping the poor without significantly discouraging domestic food output or lowering the incomes of small farmers. Most subsidized food distribution systems, whether permanent or temporary (i.e. set up in crisis situations), reach only the urban poor; this is one main concern with respect to their potential distributional impact. When the urban poor are considerably better off than the rural poor, it is a serious problem. In some countries, also, the administrative system suffers too much corruption to permit a subsidized food distribution system to work. Distributional impact depends also on the types of food made available The staple of most poor people in the world is rice, which we do not supply. Wheat is in many countries more of a middle class food; milk and eggs are middle and upper class foods. Unless such items as these latter are directed to the poor (i.e. in school lunch programs) they may have little effect on them.

In raising the total supply of food available, this form of aid may generally (but not always, as the above suggests) be expected to have beneficial short-term effects by lowering the price, and may affect the rural poor even if there is no direct distribution there. Most food aid is sold[1] by the government of the recipient country, and the funds so generated used for development projects. Most of Canada's multilateral food aid goes through the World Food Program, established in 1963 under the joint auspices of the United Nations and the F.A.O. About two-thirds of the food handled by this Program is used in food-for-work projects, which create jobs in rural areas. The projects are supposed to be labour intensive.[2] CIDA observes that "The experienced staff of the WFP are able to ensure that food reaches the neediest groups, groups that are often inaccessible through CIDA's bilateral channels".[3]

Apart from crisis situations, food aid must be viewed with some caution. Governments naturally prefer to keep food prices low, a policy which may be self-defeating in the medium and long run. Where food aid contributes to the feasibility of maintaining domestic food prices below equilibrium in the long run, it may be counterproductive. At its best, though, there are few other policies where the beneficiaries can be defined with as much confidence as being fairly low income people, often in real distress.

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1 About 80 percent of total food donations and nearly all of bilateral food, according to CIDA; see Canada and Development Cooperation, op. cit.

2 Ibid., p. 89.

3 Ibid., p. 89.

Non-Food Aid

CIDA has during the last few years been passing through a similar reorientation of purpose to those of AID, MOD, etc. Income distribution and poverty alleviation are much more conscious considerations. As with any bureaucracy, some CIDA personnel are more aware of the issues and up to date on research than are others. On average the loan officers have little time to read or think about the broader issues of development, and are not in a position to evaluate possible distributional effects of many types of projects. Others are, not totally without reason, skeptical of the "new" approach. Similar statements could be made about many, perhaps most, of the consultants who must play a large role at the various stages of CIDA's bilateral projects. They are probably less attuned to distributional issues than CIDA's own personnel; they have their own institutional biases against innovations and many are unable to accept the proposition that traditional technology may be superior to modern technology. When they err in this direction, it is often difficult for the CIDA person in charge to know the alternatives well enough to effectively critique the consultant.

The above considerations create an unavoidable problem if one accepts the proposition that stressing modern technology and large productive units tends to worsen income distribution. The only way to gauge its severity in CIDA programs would be to undertake a detailed analysis of a fairly sizeable number of hopefully representative projects. Its potential severity can be judged somewhat by the nature of CIDA projects. A large share have been in power, transport, and communications. These are probably among the sectors where technological alternatives are relatively few so choice of inappropriate technology may be less likely than in industry or agriculture, for example. At the same time, they are sectors whose direct benefits to the poor are likely to be smaller than, for example, an agricultural research program, a rural health program, or the like. This focus suggests that, apart from its food aid, the overall short run impact of CIDA programs on the welfare of the poor in the recipient countries has probably not been great per dollar spent.

The more pertinent question involves the present and the future; do CIDA's current operating procedures suggest widespread benefits from its program? Again excepting food aid, which generally meets this criterion, the answer is not clear. Some projects are impressively designed by this standard and any other; others are not. This is only natural, and it is drawing the balance which is difficult.

It appears that there are indeed grounds for serious concern. For one thing, the extensive tying of aid and the extensive use of Canadian (or Western trained) consultants create a double danger of a bias toward overly modern technology. The distributive impact of Canadian aid would often be better in the absence of the tying procedures.[1] Choice of consultants is a trickier problem in principle since there may be a trade-off between overall capacity and experience on the one hand and awareness of and responsiveness to the LDC context on the other. In connection with sectors where technology is flexible, the recipe of Canadian consultants and Canadian hardware will often lead to errors.

The centralized organization of CIDA is a problem also in the present context. It is axiomatic that foreigners can more easily learn about an LDC's modern (therefore Western-like) sectors than about its more traditional ones. Without the chance to become reasonably familiar with the latter, operatives can hardly be expected either to see many of the potentially productive programs in a country, or to be able to evaluate alternatives presented to them. (It must be remembered that the governments of recipient countries will often have a strong pro-modern sector bias, related both to political considerations and to the same problems of perception which foreigners suffer). It seems unlikely that programs for the poor can be easily developed from afar. Even with a more decentralized aid program, problems often arise in connection with the fact that high level decision-makers no longer spend extended periods in the field,

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1 To illustrate by a hypothetical case, if CIDA makes available a loan for agricultural mechanization, and the recipient country is tied to purchases in Canada, it will be highly likely to get the wrong technology -- too large machines, and too capital intensive.

either through their own preferences or through administrative pressures. Accordingly they may become out of touch with the current LDC situations, or at least less fully capable of applying their experience and talents to the problems at hand.

These factors often constitute an argument in favour of working through non-governmental agencies. Their personnel are often able and willing to get closer to grass roots problems and the non-modern sector of the local economy. The high human resource costs of many good programs may be more manageable when the personnel are willing to offer their services at low rates.

More generally, it may be very difficult or impossible to achieve good distributional impacts if to the constraints and biases already implicit in tied aid, foreign consultants, etc. is added the requirement of high aid flows per CIDA administrator. This may lead to a "large project" bias which can almost assure negative distributional effects. CIDA appeared recently to be moving into a crisis of this sort, but with present decreases in real aid flows the pressure may be lightened.

Any aid agency must accept the fact that most of its staff cannot be expected to couch each decision in the context of broad development issues and the latest information. The incompetencies and/or obsoleteness of their backgrounds often lead to predictable types of errors. One institutional option for controlling these is the use of guidelines which are sufficiently specific to rule out certain types of error. Agencies like USAID have in effect elected to narrow the range of discretion of loan officers by specifying target groups more precisely than before, and requiring reasonable demonstration that a substantial share of benefits will go to lower income families. CIDA should consider moving in this direction, especially with respect to certain types of aid, though the costs of decreased discretion must obviously be weighed carefully in the balance.

In summary, Canada's aid has doubtless had mixed effects on income distribution in and among recipients. Only ex-post project-by-project analysis could provide a good reading on this. It seems unlikely that the distributional effects, if generally positive, have been large. They may have been on balance negative, but again probably not dramatically so. Careful attention to the economies of distribution can improve -- and, one hopes, is gradually improving -- performance in this respect, but there are no grounds for complacency at this point.