## The Widening Gap\*

1. In public discussion in the 1950's references to the position and prospects of poor countries were often linked to the idea of a vicious circle of poverty and stagnation, to the thesis that poverty sets up practically insurmountable obstacles to its own conquest. This thesis in turn was, and often still is, linked to important suggestions for policy, notably the suggestion that the development of poor countries requires heroic domestic efforts, involving large-scale sacrifices, supplemented by massive foreign aid in the form of inter-governmental grants and subsidised loans.

In more recent years, references to a widening gap in incomes and living standards have replaced references to a vicious circle of poverty in discussions of the position and prospects of underdeveloped or developing countries. (These expressions are familiar euphemisms to denote countries which are poor, or more exactly materially or technically backward, compared to western Europe, North America, Australasia and Japan.) Indeed, it is probable that while in the 1950's most non-professional readers, if questioned in a free association test, would have linked the underdeveloped world to the vicious circle of poverty, they would now recall an ever-widening gap in incomes and living standards between developed and developing countries. And like its predecessor, the widening gap is also linked to important corollaries for policy, notably insistence on the continuation of expansion of large-scale foreign aid to prevent the emergence of what is thought to be the morally intolerable and politically explosive situation which would result from the unchecked operation of the forces which are supposed to lie behind the widening gap.

<sup>\*</sup> Much of the argument of this paper is developed at substantially greater length in a forthcoming book *Dissent on Development: Studies and Debates in Development Economics* to be published by Messrs. Weidenfeld & Nicolson at the end of 1971.

The thesis of the vicious circle was both the predecessor and the progenitor of the widening gap. If the poverty of underdeveloped countries by itself made material progress impossible, then the so-called gap, that is the differences in per capita incomes between the advancing, developed world, on the one hand, and the stagnant underdeveloped world on the other hand, would necessarily widen

persistently.

But the thesis of the vicious circle of poverty and stagnation is obviously invalid. If it were valid, countless individuals and groups could not have risen from poverty to prosperity as they have done throughout the world in both rich and poor countries. The thesis is refuted also by the very existence of the advanced countries all of which began as poor. Indeed, as the world is a closed system, and all of it was underdeveloped at one time or another, the thesis is incompatible with development as such. Finally, it is refuted also by the rapid progress since the second half of the nineteenth century of many parts of the underdeveloped world in the Far East, in East and West Africa and in Latin America. The material advance of many underdeveloped countries is apt to be overlooked when the underdeveloped world is regarded as a homogeneous stagnant mass, as is the frequent practice in both academic and public discussion. The advance is often overlooked also because a low level of income is frequently confused with stagnation, a treatment which confuses a low level with a zero rate of change. It would be tempting to consider how such a crude notion could ever have secured wide acceptance in apparently serious discussion, including publications which are at least ostensibly academic. But the temptation has to be resisted on this occasion, as it would lead into the fascinating but treacherous fields of the sociology of knowledge and of communications.

Once it is realised that the thesis of the vicious circle of poverty is invalid, no simple conclusion is possible about the movement or significance of the differences in per capita incomes between different societies. And we shall see shortly that although the shortcomings of the notion of the ever-widening gap cannot be so easily and immediately exposed as those of the thesis of the vicious circle of poverty, the idea of the widening gap, at least as it is usually put forward, is no more illuminating, and can no more serve as bases of sensible discussion, let alone of rational proposals for policy, than the idea of the vicious circle. I intend to

demonstrate some of the major limitations and defects of the concept. However, before doing so, I intend to note two other issues related to this concept which bear on major problems of policy usually connected with the widening gap.

The first point is one of terminology, but is nevertheless significant. When discussing the wealth or incomes of persons or groups, especially when comparing them, we should appropriately refer to differences rather than to inequalities. The term difference is neutral: it does not prejudge either the origin of the differences in incomes and wealth, nor the merits, costs and implications of attempts to remove them. The term inequality on the other hand is loaded or coloured: it suggests that the position is unsatisfactory, and that it ought to be, and can be, readily rectified. Further, references to inequality often conceal important ambiguities, notably (but not only) in that equality on one criterion implies inequality on another criterion. An obvious example arises in comparison of incomes of populations whose age composition differs: when incomes are equal in the same age groups they will normally differ between populations of different age compositions. Or again when workers receive equal piece rates, their weekly earnings or annual incomes can be expected to be unequal.

The second point is directly related to policy. The widening gap is usually mentioned to introduce proposals for policy, especially proposals for foreign aid to underdeveloped countries. Yet reference to a widening gap cannot serve as argument for sensible policy without examination of the conduct of the governments and of the populations of actual or prospective recipients of aid. For instance, a number of African governments have in recent years effectively expelled many thousands of economically highly productive Asians whose incomes were above the average in these countries. These policies have thus necessarily reduced overall average incomes in these countries, and thereby necessarily widened the gap between incomes there and incomes in richer countries; and by reducing the rate of growth of per capita incomes they have the same effects for the future. And such policies do not form an isolated example, because throughout the underdeveloped world governments have in recent years restricted the activities of productive ethnic minorities, measures which have frequently been followed by expulsions. Familiar examples include the treatment of the Chinese in Indonesia, of Indians in Burma and Ceylon, of Asians in many African

2

countries, of Greeks and Armenians in Egypt, and of Europeans in many Asian and African countries. The groups adversely affected are generally above average in productivity and incomes in these countries, so that these policies have both reduced current per capita income and retarded their prospective rate of increase, thus widening the difference in per capita incomes between rich and poor countries, both at any given time and in the future. Somewhat analogous results flow from restrictions on the inflow and deployment of private capital from abroad, which are practically general throughout the underdeveloped world. Quite plainly it is not sensible to talk about present and prospective differences in incomes without reference to official policies.

The relevance is also obvious of differences in attitudes, mores and modes of conduct of societies between which differences in present and prospective incomes are compared. To note but one of countless obvious examples, the widespread reluctance to take sentient animal life in South Asia necessarily reduces both current and prospective incomes there, with obvious implications for present and prospective income differentials between these countries and those of the west.

2. - As usually presented, the notion of the widening gap suffers from major conceptual and statistical defects.

To begin with it is rarely made clear what is meant by the gap itself. It is usually not specified whether the gap refers to differences in absolute magnitudes of average (per capita) incomes, or to proportionate, relative differences. Yet this distinction is fundamental because the two types of differences invariably change at different rates, and often in opposite directions, and further because proportionate or relative differences are generally more significant. A simple numerical example will illustrate the fundamental nature of the distinction. Consider two groups with per capita incomes of 100 dollars and 50 dollars in the first period, and 1,000 dollars and 900 dollars in the second period. The gap in the absolute sense has doubled from 50 dollars to 100 dollars, but the relative difference has fallen by four-fifths from 50 per cent to 10 per cent. It is the relative difference in incomes which is normally regarded as more significant. For instance, most people would regard a difference in personal income between 100,000 dollars and 90,000 dollars as less significant than between 2,000

dollars and 1,000 dollars, even though the absolute gap between the former is ten times more than between the latter.

The relative difference in the per capita incomes of the highest and the lowest decile of income-earners in most European countries has almost certainly diminished over the last two hundred years, as a result of the improvement of the position of unskilled labour. But the absolute difference is almost certainly larger because of the rise in the absolute levels of income. And the main factors behind the long term increases in incomes, such as the spread of skill and the accumulation of capital, can be expected usually to widen absolute differences in per capita incomes between randomly chosen groups, and simultaneously to reduce the relative or proportionate differences between certain major groups by reducing the scarcity of the resources of the more prosperous categories, compared to the poorer categories. Further, when incomes of different groups increase uniformly over a period, the differences between the absolute level of per capita incomes of say the highest and the lowest decile must increase, even though the position of both groups has improved. Thus the distinction between absolute differences and proportionate or relative differences is fundamental. Yet the allegations about the ever-widening gap do not usually make it clear which type of difference is envisaged. The use of the term gap suggests differences in absolute magnitudes, while as in most contexts it is the movement in ratios which is interesting or relevant. Moreover, it is generally not possible sensibly to examine either the significance or the validity of these allegations as they are rarely if ever supported by statistical evidence.

The notion of the gap suggests that there exists a distinct and appreciable discontinuity in per capita incomes of countries classified as developed or underdeveloped (or developing). But this is not so. There is no significant difference between the per capita income of the poorest developed country and the richest underdeveloped country. There is a more or less continuous gradation; and any difference between per capita income of the poorest country among those classed as developed on the one hand, and that of the richest country classed as underdeveloped on the other hand, is a small fraction of the errors and biases in the conventional statistics. And because the line of distinction is arbitrary and countries are not uniform entities, there are groups and regions in many poor countries with higher incomes than those of many countries classed as

developed or rich, and higher still than the per capita income of many groups and regions in developed countries. These considerations are again obscured by references to the gap, which implies substantial discontinuity in the range of per capita incomes, and also suggests a large measure of homogeneity within aggregates.

The magnitude of the gap (whether interpreted as a difference in absolute magnitudes of per capita incomes, or as a ratio) depends on where the line between developed and underdeveloped countries is drawn. And in the absence of a wide gap between the per capita incomes in the poorest developed countries and the richest underdeveloped countries the line of division is necessarily arbitrary. In practice it depends sometimes on accident or personal preference, but more often on political pressures. Official spokesmen of certain countries are apt to say that their countries are underdeveloped when foreign aid is being discussed, but reject this suggestion in other contexts. Communist countries are usually not included in the underdeveloped world, though on the basis of per capita incomes or living standards the most important of them would be appropriately so classified. Moreover, the fact that per capita incomes give an incomplete index of development is at times recognized in public discussion, at least by clear implication. Some of the oil states of the Middle East, usually and appropriately, termed underdeveloped, have very high per capita incomes. The distinction between developed and underdeveloped countries is not only imprecise, but also impermanent. Not only did all developed countries begin as underdeveloped, but some European countries, including for instance Italy, now classed as developed, were until recently usually regarded as underdeveloped. These changes through time plainly preclude any simple assessment of long run changes of differences in per capita incomes of the two groups the composition of which is changing. A widening difference in per capita incomes between the two groups can readily be established by changing the composition of the groups.

The developed world and the underdeveloped world, that is, the aggregates between which the gap is supposed to widen, are exceedingly heterogeneous collectivities. For example, even the Non-Communist underdeveloped world, which comprises about half the world's population, includes aborigines, desert peoples, the tribal societies of Africa, the hundreds of millions of South Asian villagers, the large Chinese populations of South East Asia, the inhabitants of

huge cities in India and Latin America. These societies differ radically among themselves, as well as from those in the west, in physical and social conditions, in the abilities, attitudes and institutions of their populations, in the policies pursued by their governments; and they differ also in rates of material progress. It is largely meaningless to average on a global basis societies so profoundly different in their material conditions and the determinants behind these.

Q2

In recent years and decades per capita incomes in many parts of the underdeveloped world have increased very fast, much faster than in many developed countries, including Britain and America. (This conclusion is not affected by the errors and biases of international income comparisons which we shall note shortly.) Even according to the statistics of the United Nations Economic Commission for Latin America (an organization which habitually urges that the economic progress of the underdeveloped world is too slow) the per capita output in Latin America as a whole grew appreciably faster between 1945-55 than it did in the United States of America. The many other familiar examples of recent rapid material progress and substantial rise in per capita incomes in underdeveloped countries include South Korea, Taiwan, Hong Kong, Thailand, the Ivory Coast, Kenya, the oil states of the Middle East and many others as well. There is no doubt that relative differences in incomes between these countries, and many, perhaps most, developed countries narrowed in recent years and decades.

Again, it is usually not specified how average incomes or living standards of the underdeveloped world are computed, nor which of the different concepts of average (for instance, median, mode or arithmetic mean) are used which would again have to be made clear for reasonable precision.

Two other points which show the dangers of worldwide

aggregation in this general context may be noted briefly.

First, there is the significance of differences in age composition. We have already noted that when the average incomes of the same age group are equal in two populations, the average incomes of the two populations will differ if their age composition differs. In underdeveloped countries the age composition usually differs significantly from that in developed countries because of the much higher proportion of children whose incomes and requirements are lower than those of adults.

The Widening Gap

Second, four countries only, India, Indonesia, Pakistan and Brazil account for about three-fifths of the population of the under-developed world outside China. India alone represents over one-third. Thus a slow rate of material advance in these countries conceals the progress, at times even rapid progress, of many under-developed countries when their performance is aggregated.

62

Reference to a widening gap clearly implies a time element. Yet the period over which the gap in incomes is supposed to widen is rarely mentioned in these discussions. The relevance of this consideration is obvious, because the rate of progress of different societies varies through time, as is clear from the changes in the relative economic position of different societies in the course of history, changes which include economic decline both absolute and relative to other societies. These familiar phenomena are inconsistent with a supposedly ever-widening gap between rich and poor as a general trend.

3. - Allegations about the widening gap often refer to such ideas and statistics as those of changes in growth rates of per capita incomes in some underdeveloped countries or groups of countries, from, say, one half per cent to one per cent, or to the magnitude of differences in levels of per capita incomes between developed and underdeveloped countries, and also to differences in growth rates of per capita incomes. These references habitually ignore the wide and often enormous margins of error in these estimates and comparisons.

To begin with, even the population statistics of underdeveloped countries, which underlie per capita incomes and which are free from conceptual problems, are exceedingly unreliable. For instance, according to the official statistics the population of Nigeria in 1963 was 55.6 million. Professor Peter Kilby, a prominent scholar of Nigerian affairs, estimated it at 37.1 million. Again, the Second Indian Five Year Plan estimated the Indian population growth at about one and a quarter per cent per annum over its duration; the actual figure was subsequently found to be over two per cent, thus exceeding the estimate by more than four-fifths.

Quantitatively even more important are the huge margins of error in estimates and comparisons of income. There are many reasons for these biases and errors. This matter is so fundamental to this area of discussion and so little appreciated, that it warrants extensive consideration.

These comparisons usually underestimate incomes in poor countries relatively to rich ones, thereby exaggerating the difference in both incomes and living standards. Probably the principal reason for this particular statistical bias is the use of rates of exchange in these comparisons which greatly understate the domestic purchasing power of the currencies of poor countries relative to those of rich countries. Another important reason is the much greater importance of subsistence and near-subsistence production, and of economic activity within the family in poor countries compared to rich countries. These categories of economic activity are either completely ignored or substantially undervalued in national income statistics. Again, many goods and services which are generally included in the national income are more nearly costs rather than income, and these are usually more important in rich countries than in poor countries. Examples include travel to and from work; the high rents involved in living near one's work; and the necessary expenditure of organising complex industrial and urban life. And there are also other reasons for the relative understatement of income of poor countries in these comparisons.

Much of this has been known for some time. But recognition both of the significance of these problems, and of the reasons behind these errors and biases, owes much to the recent and careful work of Professor Dan Usher, a Canadian statistician. He wrote in an article published in 1963:

For example, the conventional comparison shows that the per capita national income of the United Kingdom is about fourteen times that of Thailand. Recomputations made by the author to allow for various biases in the comparison suggest that the effective ratio of living standards is about three to one. Even if the recomputed ratio is doubled, the change in order of magnitude is large enough to affect our way of thinking about the underdeveloped countries.<sup>1</sup>

Professor Usher developed his ideas at greater length in a more recently published book entitled The Price Mechanism and the

<sup>1 &</sup>quot;The Transport Bias in National Income Comparisons", Economica, May 1963, p. 140.

Meaning of National Income Statistics.<sup>2</sup> The following passages taken from the introduction of that book summarise his position:

... this book shows that statistics like these may contain errors of several hundreds per cent... the discrepancy is not due primarily to errors in data... the fault lies with the rules [of national income comparisons] themselves... [which] generate numbers that fail to carry the implications expected of them.

In Thailand I saw a people not prosperous by European standards but obviously enjoying a standard of living well above the bare requirements of subsistence. Many village communities seemed to have attained a standard of material comfort at least as high as that of slum dwellers in England and America. But at my desk I computed statistics on real national income showing people of underdeveloped countries including Thailand to be desperately if not impossibly poor. The contrast between what I saw and what I measured was so great that I came to believe that there must be some large and fundamental bias in the way income statistics are compiled... Something is very wrong with these statistics. For instance, if the figure of \$40 for Ethiopia means what it appears to mean, namely that Ethiopians are consuming per year an amount of goods and services no larger than could be bought in the United States for \$40, then most Ethiopians are so poor that they could not possibly survive, let alone increase their numbers... National income statistics are the principal medium through which we see the process of economic growth. We characterise countries as developed or underdeveloped according to their national incomes. Income statistics are also components of measures of the productivity of industries and of the equality of the income distribution. The main point of this book, brought out both by the theory and by the numbers, is that the picture conveyed by national income statistics is often distorted, not because the statistics themselves are inaccurate, nor because they fail to reflect accepted canons of statistical method, but because we attribute to income statistics a social meaning that they do not necessarily possess.

The considerations listed so far refer to estimates and comparisons of per capita incomes. Further complications arise in trying to compare living standards. These standards are affected by differences in requirements; for instance in the usual lower requirements of food and clothing in underdeveloped countries, and in the

usually higher availability of leisure there. On the other hand, life expectation, which is an important component of living standards, is usually higher in developed countries than in underveloped countries. Further deep-seated problems arise in attempts to compare the conditions of economic welfare between different societies. For example, different economic processes differ widely in their effects on people's capacities and opportunities for enjoying their incomes.

It is plainly necessary to note these conceptual problems and huge margins of error and bias in national income estimates of developing countries, and in international comparisons. It is the conventional figures and comparisons of per capita incomes which serve as the usual or principal basis for classifying countries as developed or developing, rich or poor, and also as a major criterion in the allocation of foreign aid.

4. - The difficulties and problems noted so far refer primarily to comparisons of *levels* in per capita income or standard of living. Estimates and comparisons of *changes* in incomes and living standards run up against further problems of concept and of measurement arising largely from changes in rates of population growth in poor countries, and from differences between rates of population growth in developed and developing countries.

The usual discussions and comparisons of the levels of incomes focus on per capita incomes and their rates of change. This approach obscures important conceptual problems in the definition and measurement of income, notably in that it ignores the satisfaction of living longer and having children. Over the last 50 to 80 years populations in underdeveloped countries have increased greatly, mostly by a factor of between two and five, largely as a result of a fall in death rates, especially among children. This change implies longer life expectation. The position of those who have failed to die has certainly improved, as has the situation of those whose children live longer. Thus the widely canvassed and deplored population explosion in the underdeveloped countries in a large measure reflects a decrease in mortality which most people rather welcome. In statistics of national income the birth of a calf is shown as an increase in living standards but that of a child records a fall because the same income has to be divided among more people. Health and life expectation are perhaps the most important components of well-being outside the field of emotions. Yet they are

<sup>2</sup> Oxford, 1968.

The Widening Gap

ignored in the conventional national income compilations. Indeed, better health and longer life expectation often reduce conventionally measured per capita incomes, so that what is plainly an improvement

in people's conditions is shown as a deterioration.

In many underdeveloped countries in recent decades population has increased much faster than in most developed countries. This has brought about a change in relative numbers. And both absolute and proportionate differences in per capita incomes can widen even when per capita incomes in poor countries grow faster than in rich countries, if the rate of increase in population is fastest in the poorest countries. Moreover, if population increases faster in poor countries than in rich countries, per capita income may fall in the world as a whole, or within the underdeveloped world, even if it has increased in every single country rich or poor. Further, in any one country the per capita income can fall even if the incomes of all individuals and groups have risen, if the poorest have become relatively more numerous. Thus when birth and death rates change, special care has to be exercised in comparing and interpreting changes in per capita incomes and in any differences between them. For instance, an increase in the survival rate of the poorest groups promotes a fall in per capita incomes, and also an increase in relative and absolute income differences between rich and poor. Conversely, an increase in the mortality of the relatively poor would bring about a reduction in the gap, which would however hardly represent an improvement in their condition.

5. - The criticisms in sections 3 and 4 of international comparisons of incomes, and of changes in incomes, are not directed against all uses of national income accounting. For instance, national income statistics are useful instruments as accounting concepts, primarily for estimating the volume of goods and services available for different purposes in a country or society over a period. But this has nothing to do with international or inter-temporal comparisons of income, or with questions of the measurement of welfare. An accounting concept designed to aggregate and measure a flow of goods and services, is not a device for analysis and comparison of modes of living, or of their psychological counterparts.

It is already a simplification to express in a single figure all income economic conditions of one person. The simplification is carried further when the diverse circumstances of a large number

of persons and groups are averaged out, and expressed as a single figure of per capita income. And the process is carried yet further when these averages are then compared between communities which differ in age composition, whose physical and social living conditions differ widely, and which enjoy widely different amounts of leisure, work at different intensities, and who undergo different

periods of training.

People at times implicitly recognize the inadequacies of conventional income statistics as indices of development. We have already noted that some of the oil states of the Middle East are habitually and rightly regarded as underdeveloped, even though they have very high per capita incomes. Yet this classification is appropriate. Even when the oil revenues are used for the benefit of the population, it soon becomes clear that these societies cannot be readily transformed to resemble western type societies, where per capita incomes may be on the same level as those of the oil states, but where attitudes and living conditions differ from those in these states, and which moreover have experienced centuries of sustained development.

Of course, even if statistics were much more reliable and meaningful than they are in fact, and also covered people in particularly similar social and physical living conditions, they still could not serve as indices of welfare, because this is a psychological state. The naive contemporary belief is unfounded, that virtually the whole of personal and social life can be successfully expressed

in a few figures intelligible to all.

6. - Sensible discussion of the comparative position and progress of developed and developing countries is further obfuscated by frequent references to other criteria of economic performance and progress of countries, such as the level of investment expenditure, the volume of industrial production, the generation of electricity, and many others. We may note briefly two concepts or criteria often mentioned in public discussion, namely the terms of trade and the share of developing countries in world trade.

It is often suggested that the underdeveloped countries face persistent deterioration in their terms of trade. As is well known this is a familiar theme of the literature of the UN and of UNCTAD (United Nations Conference on Trade and Development). These allegations are partly untrue, partly meaningless and partly irrelevant.

The Widening Gap

To begin with, the terms of trade of the developing world have in recent years been highly favourable, certainly far more so than they were before the second world war, and in the early years after the second world war. Indeed, they are probably more favourable than at any time before, except one or two boom years,

especially those of the Korean boom.

Moreover, the concept of the terms of trade relevant to development and material welfare is not that of the commodity terms of trade, but certain other concepts, primarily the factoral terms of trade.3 Factoral terms of trade take into account changes in the real cost of production of exports, and thus indicate the volume of imports obtainable with a unit of domestic resources. The real cost of production of the major exports from developing countries has fallen enormously in recent decades. For example, while at the end of the nineteenth century rubber was collected at high cost from naturally-growing trees in the jungle, a few years later it came to be produced at a fraction of that cost from large and small plantations in the Far East. Again, in recent years the development of new techniques and their extensive adoption has greatly reduced the real cost of production of rubber on most estates and smallholdings. Analogous considerations apply to many other export products from the developing world including petroleum products, copper, cocoa, sugar and oil palm products. Quite obviously reference to changes in export prices without noting production costs are meaningless.

Again, references to changes in the terms of trade without noting changes in the total volume of exports and imports are of limited interest. In the early years of the century, a few thousand tons of plantation rubber were exported annually from Malaya and the Netherlands East Indies (the present Indonesia) at very high prices. By the 1920s the price had fallen greatly, but annual exports were in hundreds of thousands of tons, with a much greater impact on income and welfare. Much the same applies to the history of the major export crops of both East and West Africa since the early 1900s. Again petroleum products represent by far the most important single export from the developing world, and the volume of these has increased vastly in recent years and decades.

The usual computations of the terms of trade also often ignore the appearance of entirely new products among the imports of developing countries, and also changes in the performance and quality of manufactured imports. In recent years there have been numerous instances of entirely new products among imports of underdeveloped countries, such as technical goods, consumer durables, and a wide range of chemicals and plastics. Moreover, the performance and quality of many manufactured imports have changed so greatly over the last fifty years, that the products are the same in name only, though this is ignored in most foreign trade statistics. Locomotives, motor cars, buses, earthmoving equipment and radios, are obvious examples of products which have changed out of all

recognition since, say, the first world war.

The UN-UNCTAD allegations that the terms of trade of underdeveloped countries or primary producers, which are sometimes identified with developing countries, have deteriorated, are achieved primarily by such devices as omission of the periods over which they have improved, or shifting the starting point of the discussion, or quite often by omitting certain products from the discussion. For instance, the alleged secular decline in the terms of trade of underdeveloped countries was first widely publicised in the UN literature on the basis of a series beginning with the 1870s and ending in 1938; in the Prebisch Report and the UNCTAD literature it is derived from a series beginning with 1950 and terminating with 1961. Between 1938 and 1950 the commodity terms of trade of primary producers improved by almost two-fifths, even without any correction for the improvement in the quality of manufactures. It is easy to assert that the terms of trade of primary producers always decline if the years when they have risen are omitted.

Again, petroleum products are omitted from the calculations of the terms of trade for developing countries in the Prebisch Report without any explanation. Yet petroleum products are by far the most important export from the underdeveloped world, and their volume has increased enormously since the second world war. This huge increase, together with the much higher taxation of the expatriate companies, has greatly benefited these countries.

These practices are made easier both by the process of global aggregation, and also by not specifying the period over which the terms of trade supposedly deteriorate. The last point is obvious, but the former is no less important. Geographically there are

<sup>3</sup> In certain contexts the income terms of trade, which incorporate also changes in the volume of trade, may be useful. We refer in subsequent paragraphs to questions of changes in the volume of trade.

substantial differences between such areas as the Middle East, Asia, Africa, Australasia, Latin America, which themselves are extremely heterogeneous. One or two products are predominant among the exports of many underdeveloped countries. The prices of individual products often move differently, with the result that the terms of trade of individual underdeveloped or primary producing countries often show divergent movements. This state of affairs makes it easier to single out instances of countries or groups of countries the commodity terms of trade of which have deteriorated over a particular period. Any worthwhile discussion even of the commodity terms of trade (and much more so of the factoral terms of trade) ought to recognise the extreme heterogeneity both of the developing and of the developed world. Indeed, such a discussion should generally be confined explicitly to the experience of one country or of a small group of countries.

Nor is it true that there has been a secular decline in the share of developing countries in world trade. According to statistics assembled by P. Lamartine Yates in his large-scale study Forty Years of Foreign Trade 4 the share of the three poorest continents, Latin America, Africa and Asia (excluding Japan) in total world exports (outside communist countries) increased from about 23 per cent in 1913 to about 28 per cent in 1953. If primary products only are considered (which account for about nine-tenths of the exports of the underdeveloped world), the share of these countries in total exports increased even more over this period, from about 36 per cent to about 49 per cent. Over this long period the underdeveloped world, therefore, gained and did not lose ground in world trade.

The well-known GATT report *Trends in International Trade*<sup>5</sup> found that the share of non-industrial countries in aggregate world exports was practically the same in 1928 and 1957 at about 30 per cent of the world total. This result is especially notable in the face of the inflationary and protectionist policies of many underdeveloped countries. Both 1928 and 1957 were years of generally high economic activity, which adds meaning to the comparison.

But even if the share of the developing countries had declined in total world trade, or were to decline during any particular period, such a situation would not necessarily imply deterioration in their economic position or prospects. For instance, the share of a country or group of countries in world trade can decline and often does decline as a result of an increase in the volume of trade between other countries which do not compete with its products, and the increased trade between which actually benefits the groups whose relative share has decreased. For instance, the 1950s saw the reconstruction of the economies of western Europe, and the liberalisation of intra-European trade with a consequent large increase in the external trade of the individual European countries. There was also a very large increase in the foreign trade of Japan. These developments brought about a decline in the share of other groups in total world trade. These groups nevertheless benefited from the increased trade of Europe and Japan; the volume of their trade also increased, though proportionately less than that of western Europe and Japan.

Moreover, changes even in the absolute volume of the foreign trade of a country or group of countries are largely meaningless unless their background is examined. Thus the volume of exports from a country can decline for such different reasons as an increase in the domestic use of previously exported products, possibly but not necessarily as a result of inflationary policies, or the introduction or intensification of protectionist policies, or a decline in export demand. For instance, the decline in the exports of Indian groundnuts since the 1940s reflects the increased domestic use of groundnuts at a time when world demand for oils and fats increased greatly. Again, the exports of many underdeveloped countries in Latin America and Asia have been adversely affected by a combination of domestic inflation and overvalued exchange rates.

Of course, changes in trading conditions of developing countries, whether favourable or unfavourable, are generally not a decisive factor in their material development, nor in the differences in the level of income, and the rates of progress between developed and developing countries. The primary determinants of material achievement are domestic, especially people's abilities, attitudes, and social and political institutions, not external market conditions.

7. - For the sake of completeness we may note one possible interpretation of the concept of the widening gap which would provide it with some measure of precision. This interpretation would be that of a widening of the relative differences in average

<sup>4</sup> London, 1969.

<sup>5</sup> Geneva, 1958.

incomes (whether mean, median or modal) between specified ethnic groups over a specified period (especially if the appropriate adjustments for differences in age composition could be made). Certain populations may exhibit greater readiness and ability than others either to promote or take advantage of technical progress, because of differences in capacities, attitudes, institutions or official policies. And there are also significant differences in demographic patterns, especially in birth rates, between different populations. These various differences could in turn reflect geographic, climatic, historical, cultural or even biological factors. In these circumstances a widening of differences in incomes would be neither surprising nor abnormal. However, this interpretation of the widening gap, while removing some of its ambiguities, still leaves untouched some major problems of comparison of incomes and living standards between widely different societies, including that of the period over which these differences are supposed to widen.

Nor would such a development imply a decline in the living standards or incomes of the poorer groups; it is quite consistent with substantial increases in the real incomes and living standards of these groups. Still less would it warrant the suggestion often implied in current discussions on international differences in incomes, that the higher incomes of the populations of rich countries have somehow been extracted from the peoples of the poor countries.

Even if the extent and direction of the gap in living standards between different populations were clearly defined over a specified period, and the basic conceptual problems recognised and surmounted (conditions which are most unlikely to be fulfilled), statistical information would still reveal nothing about the causes either of the extent or of the changes in international differences in incomes.

The list of the fundamental defects behind the assertion of an allegedly ever-widening gap in incomes and living standards between rich and poor countries could be readily extended and elaborated. But what has been said is amply sufficient to show that the familiar allegations do not even specify what the gap is, what it means, between whom it exists and over what period it is supposed to widen. The widening gap appears to be a description of conditions and trends; it is in fact a prescription enjoining us to feel guilty and to give more aid.

P. T. BAUER