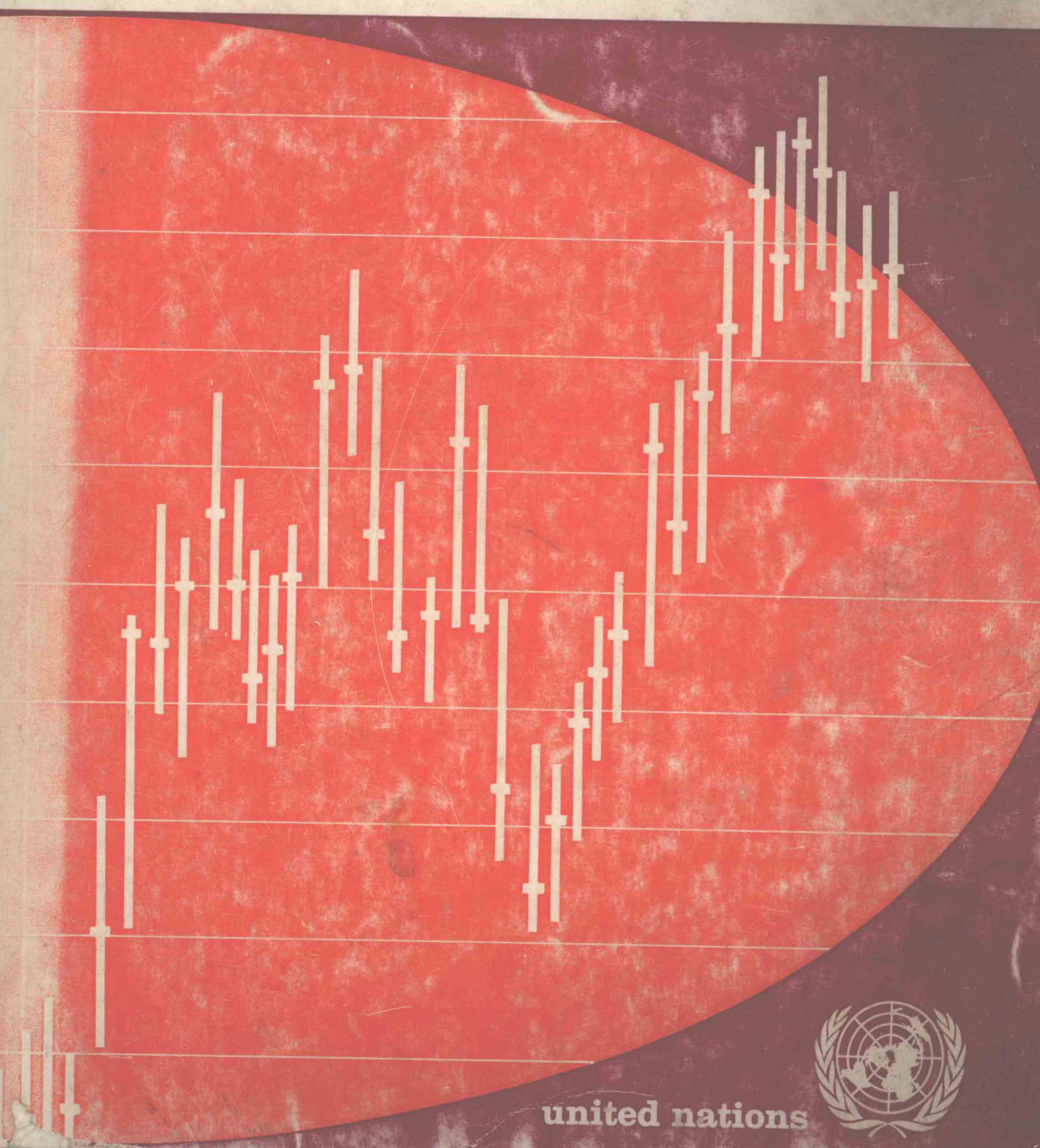


survey, 1969-1970

the developing countries in the 1960s:
the problem of appraising progress



united nations



department of economic and social affairs

world economic survey, 1969-1970

the developing countries in the 1960s:
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FOREWORD

This report, *World Economic Survey, 1969-1970*, is the twenty-second in a series of comprehensive reviews of world economic conditions published by the United Nations. It is issued in response to General Assembly resolution 118 (II), in which the Secretary-General was requested to prepare an annual review and analysis of world economic conditions and trends. The report is intended to meet the requirements of the Economic and Social Council and other organs of the United Nations for an appraisal of world economic conditions which may serve as a basis for recommendations on economic matters. It is also intended to stimulate interest in and discussion of international economic problems among a more general public audience.

The present *Survey* appears at the beginning of the Second United Nations Development Decade for which guidelines and objectives were laid down in an International Development Strategy adopted by the General Assembly in resolution 2626 (XXV) on 24 October 1970. This Strategy calls for a systematic scrutiny of the progress that has been made towards achieving the goals of the Decade. The General Assembly itself is to make an overall appraisal on a biennial basis.

In order to prepare the ground for such appraisals as the Decade advances, the present *Survey* is addressed to the methodological problems that are involved in measuring progress in the developing countries. It reviews the data that are available and

suggests ways in which they might be used to throw light on the economic and social performance in the 1960s of the countries—both developing and economically more advanced—that will be implementing the International Development Strategy in the 1970s.

The *Survey* consists of five chapters preceded by a brief introduction setting forth the principal features of the measurement problem. Chapter I deals with the production of goods and services and the ways in which this might be measured. The next two chapters deal with the ways in which what has been produced is used—chapter II for the purpose of immediate consumption and the raising of levels of living, and chapter III for expanding the capacity of the economy to produce goods and services in the future. As production, consumption and investment are closely interrelated operations, their continuity and growth require a viable economy; hence chapter IV is concerned with the question of economic balance both within individual countries and between one country and the rest of the world. Chapter V looks more closely at the “rest of the world”, which, in the case of the developing countries, consists of the more advanced countries whose trade and aid policies shape the external environment affecting the development process.

The *World Economic Survey* is prepared in the Centre for Development Planning, Projections and Policies of the Department of Economic and Social Affairs of the United Nations Secretariat.

Explanatory notes

The following symbols have been used in the tables throughout the report:

Three dots (...) indicate that data are not available or are not separately reported

A dash (—) indicates that the amount is nil or negligible

A blank in a table indicates that the item is not applicable

A minus sign (—) indicates a deficit or decrease, except as indicated

A full stop (.) is used to indicate decimals

A comma (,) is used to distinguish thousands and millions

A slash (/) indicates a crop year or financial year, e.g., 1960/61

Use of a hyphen (-) between dates representing years, e.g., 1961-1963, signifies the full period involved, including the beginning and end years.

Reference to "tons" indicates metric tons, and to "dollars" (\$) United States dollars, unless otherwise stated.

The term "billion" signifies a thousand million.

Annual rates of growth or change, unless otherwise stated, refer to annual compound rates.

Details and percentages in tables do not necessarily add to totals, because of rounding.

The following abbreviations have been used:

AfDB	African Development Bank
AsDB	Asian Development Bank
CMEA	Council for Mutual Economic Assistance
DAC	Development Assistance Committee [OECD]
ECE	Economic Commission for Europe
EDF	European Development Fund
EEC	European Economic Community
EIB	European Investment Bank
FAO	Food and Agriculture Organization of the United Nations
FUNDWI	Fund of the United Nations for the Development of West Irian
GATT	General Agreement on Tariffs and Trade
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IMF	International Monetary Fund

ISIC	International Standard Industrial Classification
OECD	Organisation for Economic Co-operation and Development
SITC	Standard International Trade Classification
SNA	System of National Accounts
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNFC	United Nations Fund for the Congo
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNRWA	United Nations Relief and Works Agency
USDA	United States Department of Agriculture
WFP	World Food Programme
WHO	World Health Organization

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

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INTRODUCTION

This *Survey* deals with the process of economic and social development and with the possibility of measuring it in ways that might be helpful not only in assessing the nature and pace of the progress that is being made but also in evaluating the efficiency of the policies that are being pursued. In order to carry out such an appraisal it is necessary to break down the complex concept of development into some of its components. It is useful, for example, to distinguish between those aspects of development that are directly reflected in human welfare and those that concern the economy as a mechanism through which individuals seek to co-operate in pursuit of their manifold objectives. By the same token, the time element needs to be kept in mind, characteristics of the current status being measured alongside those actions the fruits of which will be yielded only in the future. It is also useful to distinguish between those features of development whose effect is limited very largely to the community or national entity concerned and those that relate that entity to the rest of the world.

In the first instance, therefore, an appraisal of the state of development of a country and its progress in a given period of time requires an evaluation of performance in three separate areas—the production of goods and services, the level of living of the inhabitants and changes in the capacity of the economy to deliver needed goods and services in the future. To help in such an evaluation four criteria may be applied: in each of the areas in question, the actual performance of a country can be measured against its declared intentions, against the bench-mark of some earlier performance, against the recorded achievements of other countries in comparable situations and finally against some average or minimum target designated on an international basis.

The applicability of such criteria tends to differ from case to case. In general, the more aggregative the phenomenon, the more readily can a common measure be applied and interpreted. The more importance attaching to the structure of production, the constituent elements in the level of living and the pattern of investment and capacity expansion, the more difficult it becomes to devise appropriate bench-marks—other than the country's own intentions when these have been integrated into a development plan. The combination of goals and the weight given to each of the components in the three

main areas are unique to each country and each period, so that a satisfactory unitary measure of economic and social progress is likely to remain elusive. "Development" is no predestined path along which all countries must go; it is a diverse and uncertain process reflecting the culture and preferences of people as well as the resources at their disposal and an ever-changing technology.

In order to measure changes that have been taking place in any of the areas of principal concern in the development process, it is necessary to devise appropriate "indicators", if possible of a quantitative nature. At the country level a large number of such indicators may be desirable and feasible, taking into account the complexities and peculiarities of the local situation. At the international level selectivity is called for: the indicators would need to be confined to the most significant and widespread aspects of economic and social progress and their form would have to reflect current statistical practice as far as this was possible. While in the long run new methods of measuring the course of development can be introduced, in the shorter run it is usually necessary to prepare indicators from the currently available supply of socio-economic statistics.

In choosing indicators by which, in each of the main areas, the course of progress is to be assessed, it seems wise, therefore, to concentrate, at least in the first instance, on those phenomena about whose incidence it is possible to make a normative judgement that is likely to be widely accepted. In general, a measure of achievement in physical terms will tend to be more convincing than a financial one, though the latter may be useful as an indicator of intention and of the effort that has been made. In the welfare area, for example, a decline in infant mortality rates is likely to prove a better indicator of development than would an increase in the amount or proportion of resources devoted to health services. Similarly, the value added in agriculture and industry—or the material output—probably provides a less equivocal measure of performance in production than would changes in the GDP as a whole.

For the purpose of progress appraisal each country must select the series of indicators it judges to be most appropriate in the light of its own economic and social circumstances, its own ability to carry out the necessary measuring process, the character-

istics of its own development plan and the detail with which it wishes to monitor the operation of specific policies. The perfection of such indicators is, indeed, an integral part of the planning function itself.

At the international level the battery of indicators must necessarily be a more limited one. While it should be designed to assess progress in each of the main areas of development, it must also serve as a common measuring rod, applicable to the greatest possible extent to all the developing countries. This does not mean the rejection of any indicator that is not available in an equally accurate and timely fashion from every developing country. But it does mean that countries that cannot provide a particular indicator that has been chosen on the basis of its appropriateness and availability in most developing countries, will need to be assisted to gather the requisite information as a regular part of economic intelligence operations. Until such information becomes available a substitute indicator will have to be used.

Over a given period of time, such as that for which progress is to be measured, many of the objectives being aimed at by individual countries are essentially competitive in their nature: the resources absorbed in seeking one are not available for achieving others. Thus, while intercountry comparisons can be made item by item, it is extremely difficult to compare the performance of economies as a whole. There are no objective criteria for judging the proper division of resources between consumption and investment, or the allocation to one component of the level of living or one element of production capacity rather than another. It is because of this difficulty that so much emphasis has had to be placed on comparisons of over-all production: it could be argued that the better the production performance—that is, the more goods and services are produced—the better the prospects for allocating resources to each of the various end uses that make up the development process. Or, even more certainly, failure to produce the required goods and services will prevent or retard the achievement of higher levels of living or greater productive capacity.

While meaningful assessment of performance in respect of a range of relevant but diverse indicators can be made only at the country level—this being the highest level at which the concept of economic and social development has operational significance—there are two ways in which helpful international comparisons can and should be made. One involves combining a number of specially selected indicators into a single measure of socio-economic status by which countries can be ranked. The other involves the diagnosis of imbalances which, unless corrected, are likely to slow down the future rate of progress.

A “socio-economic status” ranking depends on an essentially subjective and normative selection and weighting of indicators. It thus differs from a ranking by “degree of development” or by “correspondence points”—concepts that are based essentially on statistical correlations, over some historical period, between various quantifiable characteristics of economies with different levels of *per capita* income. In the present context it is assumed that each country decides on the path it wishes to follow, and formulates its development strategy accordingly. National choices are all subject to various constraints—population, natural resources, local culture, historical ties, current socio-economic status and so on—but these differ so widely in their effect that they are unlikely to propel countries to a specific course of development. While domestically, therefore, the criteria of performance must be combined in accordance with the country’s own objectives and priorities, an international ranking system must rely on a common set of indicators chosen on the basis of an *a priori* judgement of the importances of the phenomena they measure.

Before suggesting the phenomena that seem to merit inclusion in such a set, it is necessary to take into account the dynamic aspects of the problem. As indicated above, development implies not only current status but future capability of maintaining (and enhancing) that status. Hence, an international comparison must include some indication of the viability of the economy and the extent to which past performance has given rise to imbalances that might conceivably threaten future performance.

In the light of these considerations, those aspects of socio-economic performance that appear to be most significant for international assessment include material output per person, adequacy of nutrition, infant mortality and life expectancy, literacy, availability (or lack) of gainful employment, internal price stability and domestic and foreign savings ratios. These phenomena are not equally easily measurable, and the practical problems involved in devising indicators that could be brought together for ranking countries and compiling a composite index virtually rule out any immediate solution. The difficulties are partly conceptual (as in the case of unemployment in an economy with an important subsistence sector) and partly statistical, for many countries do not yet have an accurate knowledge of all the suggested phenomena, particularly in the case of those (such as nutrition and other criteria of welfare) in which distribution is as significant as totals or averages.

In interpreting these indicators of performance and status, due account must be taken of the environment in which the economy has been operating. It is clear that the nature of the external conjunc-

ture can have a material effect on the degree to which the policies pursued by a particular country succeed in achieving their intended objective. The developing countries are especially sensitive to events and policies in the rest of the world: export earnings and the inflow of capital—two critical determinants of resource availabilities—are both heavily dependent on the external environment. In appraising the state of balance of a developing economy, therefore, it is necessary to distinguish as far as possible between situations that reflect domestic events and policies and situations that have been induced from abroad.

Over and above the need to assess the impact of external changes when the course of development in individual countries is being reviewed, an examination of the working of the world economy is itself a necessary element in a progress appraisal conducted at the global level. Not only is a rational international division of labour a desirable objective for the sake of its favourable influence on global productivity and output, but in varying degree individual Governments undertake explicitly or implicitly to pursue policies designed to facilitate the flow of trade and finance in ways that will benefit countries that, for whatever reason, are tending to lag behind. On both scores the world economy needs regular evaluation.

In the present context special importance attaches to actions by the more advanced countries that affect the flow of resources to the less developed. Actions that expand the demand for the goods and services that developing countries can export enlarge their capacity to import and hence provide them with the development goods not available from their own relatively immature industry. Resource gaps can be filled more directly by loans or gifts. In both areas policies need to be kept under review and per-

formance assessed against international targets (such as the liberalization time-table agreed to in the Kennedy Round of tariff negotiations or those adopted in the United Nations General Assembly for the volume and terms of aid), against the commitments made by individual donor countries and against the need of developing countries for external resources to sustain designated rates of economic growth.

The chapters that follow are thus partly methodological in nature: under each of the suggested headings—production, levels of living, capacity creation, state of balance and external environment—there is a discussion of the available indicators and the problems of interpreting them. An empirical approach has been adopted with a view to illustrating the process of measurement in a realistic manner. An attempt has been made to assemble the relevant data for all countries that are Members of the United Nations and for as many non-Members as possible. The period covered is the most recent for which information on this global scale was available in 1970. For many of the variables this means 1968, though for data derived from a relatively infrequent census or sample survey the situation depicted is one obtaining earlier in the decade. In a number of cases, where the measurement of movement or change is desirable, comparisons of rates of growth over much of the decade—1960 to 1968, where possible—are presented. Countries have been included in the basic tables (presented in a statistical annex) whether or not they publish the indicator in question: the information gaps that thus appear constitute a challenge: it is hoped that they will be filled as the Second United Nations Development Decade advances and the practice of appraising economic and social progress in the sort of global framework here essayed becomes more widely accepted.

Chapter I

PRODUCTION AND SUPPLY

Whatever other objectives a country sets for itself it must make provision for the supply of the goods and services on which the attainment of those objectives necessarily depends. While a portion of that supply may come from abroad as a gift or on loan, the bulk must be produced by the country itself. An essential part of the economic and social development process is therefore the production of goods and services, and any attempt to measure economic and social progress must begin by appraising performance in the field of production.

The precise way of measuring production must be appropriate to the circumstances of the country concerned reflecting, in particular, the prevalence of the market mechanism, the complexity of the industrial structure and the nature and relative size of the export sector. The less effective the market the more difficult it is to price production and add it up in money terms. The more intricate the pattern of interindustry transactions the more necessary it is to measure output by the value added at successive stages. The greater the proportion of output produced specifically for export the more necessary it is to take external price changes—the terms of trade—into account in evaluating domestic production.

These economic characteristics differ widely among the developing countries which range all the way from simple subsistence economies to economies with an elaborate industrial and commercial superstructure, from export-oriented economies to those in which foreign trade plays a very minor role. No single system of measuring production is likely to be equally applicable. Nor, indeed, can a given method of appraising performance be applied mechanically to a given country year after year: as structural changes occur so the techniques of evaluating production must be continually adjusted.

Two distinct sets of problems thus have to be faced. Each country has to devise for itself a suitable battery of tests for appraising its production performance. And at the international level a more limited number of criteria must be selected to permit intercountry comparisons to be made and to enable countries to assess their position in relation to whatever international norms may have been established. It is clearly desirable that the international

criteria be selected from those most likely to be found useful at the country level.

THE MEASUREMENT OF TOTAL PRODUCTION

For an assessment of over-all production performance it is natural to turn first to the national accounts. A country's total output of final goods and services may be valued on a domestic (geographical) basis or on a national basis, at market prices or at factor cost, gross or net of capital depreciation.

For purposes of a short-term year-to-year survey any one of the aggregates will serve to measure the growth in total output: the differences between them are unlikely to be significant in relation to the uncertainty underlying the data going into some of the components. If measurements are to be made over longer periods, however—over the life of a plan, for example, or in comparing performance in two different plan periods—then due account must be taken of the differences in the composition of the various aggregates. As the components that distinguish these aggregates from one another are subject to different influences and may move along different time paths, it is necessary to make a conscious choice of aggregate in the light of the circumstances and needs.

The domestic product differs from the national product in respect of the treatment of the output of factors that are foreign-owned. The domestic product is the output of all the factors operating in the geographical area concerned, without reference to ownership. It is likely to be the most useful aggregate for economic planning purposes where the activity of all resident producers is at issue and the disposition of all local resources is of concern. Where distribution questions are involved, however, the national product is likely to be more relevant: it refers to the output actually accruing to the country's own citizens.

In most developing countries, the national product is the smaller aggregate as it is net of the output belonging to foreign owners, which usually exceeds by a large margin the external output of the country's own nationals. Whether the national product is expanding at a faster rate than the domestic product depends largely on developments in the

foreign direct investment sector: the two might be expected to move more or less together during a period of rapid capital inflow, but when the outflow of investment income is rising rapidly the national product will be increasing more slowly than the domestic product.

In general, it is likely to be a matter of indifference whether an appraisal of production performance is carried out at market prices or at factor cost. When government policies are changing, however, the result might be reflected in the relative size of the transfers effected by indirect taxes and subsidies. Market prices which include the consequences of such fiscal adjustments might then yield a somewhat different assessment from that conducted at factor cost (net of indirect taxes and subsidies).

Changes in fiscal arrangements may also affect the valuation of output on a net basis—after allowance has been made for the fixed capital consumed in the course of production—as against a gross basis reflecting the total volume of production. As a certain proportion of output has indeed to be used as replacement investment if the productive capacity of the economy is to be maintained, it is desirable to keep track of the course of the net product. While in principle the net product provides a realistic measure of the supply of goods and services available for consumption or the expansion of capacity, in practice it is often influenced rather arbitrarily by methods of depreciating fixed capital that are dictated by fiscal rules or applied mechanically by formula.

Nevertheless, the concept of net output is of particular importance to a developing country in which the capital intensity of the economy is increasing rapidly from a relatively low level. It must be expected in these circumstances that the proportion of new production set aside for maintaining capital equipment will need to rise. The net product would thus tend to increase at a somewhat slower pace than the gross product.

Whichever concept is used for assessing production performance, the constituent data have to be assembled in money terms preparatory to aggregation. At this stage the effects of price changes have to be eliminated. This requires the compilation of a series of price movement indicators appropriate to each of the sectoral components of the over-all product. This is a formidable task in most developing countries partly because market imperfections often interfere with price formation on a national scale, partly because the development process itself is likely to effect continual changes in the composition of the components, and partly because of the magnitude of possible price changes, reflecting both the exposure of the export sector to the sometimes violent swings in world primary product markets and the susceptibility of developing economies to

inflationary pressures. As changes in the price level may be very much greater than changes in real output, accurate deflation is a crucial matter in any measurement of production achievement.

The main purpose of such measurement is domestic: a Government needs to know what is happening to the country's total supply of goods and services in order to evaluate past objectives and policies and set new targets and formulate new policies. Even in the context of a single country's appraisal, however, it may be helpful to make international comparisons: one country may find it useful to judge its own production achievements in the light of those of other countries that are similarly placed in respect of size, resources, state of development, export composition or other relevant attribute.

Putting the results of one country's production appraisal on a basis that would permit comparison with others raises serious problems. While growth rates can be compared fairly readily—and meaningfully among countries with defined characteristics—productivity can be compared only if the data are converted to a common currency. To be realistic, such conversion should be done at a purchasing power parity, and this may differ considerably from the official exchange rate, especially in countries practising import and exchange control. Uncertainty about the appropriateness of the exchange rate consequently makes it necessary to treat intercountry comparisons of over-all productivity with special caution.

Taking all these factors into consideration, the most relevant of the national accounts aggregates for the study of production performance is probably the net domestic product at factor cost which, in principle, eliminates the potentially distorting effect of changes in indirect taxation and subsidies and makes appropriate allowance for the using up of capital—which may be expected to accelerate as development proceeds. This is not the most convenient aggregate in practice, however, partly because of the often arbitrary nature of the depreciation adjustment and partly because of the general absence of the price series that would be required for the deflation of data reported at current factor cost. For the present, therefore, international comparisons of production performance and of the growth of total output will probably have to be made on the basis of gross market price data.

MEASUREMENT OF THE KEY COMPONENTS OF TOTAL PRODUCTION

While it is difficult—at least in low-income countries—to visualize economic development without an adequate expansion in total production, the process of development also involves structural change, and to appraise production performance it is neces-