

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

# TRADE AND DEVELOPMENT REPORT, 1981

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## UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT Geneva

## Trade and Development Report 1981

Report by the secretariat of the United Nations Conference on Trade and Development



UNITED NATIONS New York, 1981

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## **ABBREVIATIONS**

ACP	African, Caribbean and Pacific group of states signatories of the Lome Convention
bbl	barrels
BIS	Bank of International Settlements
c.i.f.	cost, insurance and freight
CMEA	Council for Mutual Economic Assistance
DAC	Development Assistance Committee (of OECD)
DAC	developing countries
DMEC	developed market-economy countries
dwt	deadweight tons
ECDC	economic co-operation among developing countries
ECE	Economic Commission for Europe
EEC	European Economic Community
EMS	European Monetary System
EPU	European Payments Union
ERP	European Recovery Programme
FAO	Food and Agricultural Organization of the United Nations
f.o.b.	free on board
GATT	General Agreement on Tarrifs and Trade
GDP	gross domestic product
GNP	gross national product
GSTP	global system of trade preferences
Gtce	billion tons of coal equivalent
IMF	International Monetary Fund
LCC	large crude carrier
LDCs	least developed countries
LIBOR	London Inter-Bank Offer Rate
LPG	liquid petroleum gas
MSA	most seriously affected countries
NIEO	New International Economic Order
NMP	net material product
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
OEEC	Organisation for European Economic Co-operation
OPEC	Organisation of the Petroleum Exporting Countries
RTA	retroactive terms adjustment
SITC	Standard International Trade Classification (revised)
SDR(s)	special drawing right(s)
TNC(s)	transnational corporation(s)
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
USTS	United States Tariff Schedule
VLCC	very large crude carrier
WEC	World Energy Conference

1

#### **EXPLANATORY NOTES**

The statistical data in this report have inevitably been drawn from a large number of sources. Every effort has been made to adjust the data from these primary sources in order to ensure consistency of coverage and classification. However, this has not always been possible, and notes to the tables, as also the explanatory text in annex A, draw attention to any significant lack of comparability.

The classifications of countries used in general in this report are given in the explanatory notes to annexes A and B.

The term "dollars" (\$) refers to United States dollars unless otherwise stated.

The term "billion" signifies 1,000 million.

Annual rates of growth and change refer to compound rates. Exports are valued f.o.b. and imports c.i.f. unless otherwise specified.

Use of a hyphen (-) between dates representing years, e.g., 1965-1966, signifies the full period involved, including the initial and final years.

An oblique stroke (/) between two years, e.g., 1980/1981, signifies a fiscal or crop year.

In the tables :

Two dots (..) indicate that the data are not available, or are not separately reported.

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

A plus (+) before a figure indicates an increase; a minus sign (—) before a figure indicates a decrease. Details and percentages do not necessarily add up to totals, because of rounding.

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#### FOREWORD

This is the first of a series of annual reports which I propose to place before the Trade and Development Board for its consideration. These reports are intended to provide both an integrated review of world development and an assessment of their impact on the trade and development of the developing countries.

This first report, which is inevitably experimental, comes at a difficult time for the international economy in general and for the developing countries in particular. I hope that it will help stimulate the discussion in UNCTAD and elsewhere on the development problems confronting us.

Saman fm.

Gamani COREA Secretary-General of UNCTAD

#### **INTRODUCTION**

The decade of the 1980s has had a discouraging beginning. The volume of international trade increased by only 1.5 per cent in 1980 – a considerable slowdown when compared with an average of 7 per cent in 1960–1979. An equally disappointing outcome is expected in 1981. Moreover, the poor performance with regard to the volume of trade has been accompanied by continued inflationary pressures: for example, prices of internationally traded goods – as measured by indices of the unit value of world exports – increased by 20 per cent in 1980. Payments imbalances widened to worrisome levels as they were associated with a high degree of instability on the monetary front, especially with regard to exchange and interest rates.

To be sure, these unfavourable conditions largely reflect the cyclical deceleration in the expansion of output that the world economy is currently experiencing. There is an increasing awareness, however, that the disarray in international trade and payments stems also from factors of a less transient nature. The downward shift in the long-term growth rates of the industrialized countries has altered for the worse the prospects for world development and trade. This has recently been accentuated by the protectionist policies pursued by a number of industrial countries, which call into question the very foundations of an open trading system.<sup>1</sup>

#### A. Perspective of the report

A report that reviews in an integral fashion current economic issues and longer-run development questions encounters complex analytical problems that are not present when these two questions are treated separately. Among them, two are of particular importance. The first relates to the conventional - and convenient - practice of separating analysis of short-term economic problems from that of development and structural transformation.<sup>2</sup> In the past, short-term cyclical deviations from a full employment path in developed market-economy countries were expected to be dealt with by a mix of macro-economic fiscal and monetary policies which came to be known as demand management. Development, on the other hand, was seen as a long-term issue involving selective policies affecting the level

and distribution of investment and the structural transformation of the economy.<sup>3</sup>

From an analytical point of view, such dichotomy may be defended if it can be reasonably assumed that "fine tuning" by means of demand management can achieve full employment and that the ensuing level and structure of investment would turn out to be consistent with a full employment growth path. However, these conditions cannot be met when there is no broad consistency between the structure of production and the pattern of expenditure. At present, the cumulative effect of deep-seated social and economic rigidities, including factors affecting the distribution of income, and sharp changes in relative prices have impeded the rapid adaptation of production structures to desired patterns of demand. It is clear that these difficulties cannot be resolved through demand management alone. Apart from institutional reforms, the solution of the present problems requires changes in the structure of production through selective investment policies.

It follows that the dichotomy between short-term and development problems or, what amounts to the same thing, between demand management and investment policies is no longer admissible. A corollary is that a comprehensive review of development prospects must include an assessment of current policies, especially from the point of view of their impact on the level and sectoral allocation of investment.

The second major methodological issue confronted in the report is that the external environment of the development process can no longer be taken as a parameter of predictable value. The traditional approach to an international strategy for development has been to assume that the developed world would move along a relatively inflation-free, fullemployment path. In this context, the task of the development strategy was to devise measures designed to integrate developing countries into a world economy moving ahead at a relatively stable and predictable rate. Present conditions, however, are quite different: increased instability in world output and prices, accompanied by a downward shift in the long-term trend of growth of output of the industrial countries, have certainly rendered the external environment less predictable and favourable. One reaction to this change has been to suggest a lowering of development objectives to con-

<sup>&</sup>lt;sup>1</sup>The question of trade policies in general and protectionism in particular is the subject of a forthcoming study by the UNCTAD secretariat to be submitted to the Trade and Development Board at its twenty-fourth session, in Spring 1982.

<sup>&</sup>lt;sup>2</sup>This problem does not arise in the case of socialist countries, in which central planning provides the operational framework of all policies.

<sup>&</sup>lt;sup>3</sup>The dichotomy between short-term problems, on the one hand, and development, on the other, has also been reflected at the decision-making level. Thus, demand management has been entrusted, as a rule, to Ministries of Finance and Central Banks, while development issues have been the responsibility of several Ministries and agencies.

form to the new international conditions. This line of thought has been attacked on the normative grounds that the burden of adjustment should not fall upon the development process. There is also the danger that the degree of retrenchment required by this approach may render the system itself unstable. The present situation thus appears to require a new development paradigm, and this paradigm will need to take explicit account of the fact that issues concerning the management of the world economy, on the one hand, and long-term development objectives, on the other, are intermingled.

Both the inclusion of short-term policies in the realm of development economics and the need to search for a new development paradigm pose complex problems that cannot be easily solved. Nevertheless, this report makes a first attempt to deal with them and thus to help to focus attention on what appear to be the elements of the agenda for the 1980s.

What follows is a brief account of the salient features of the report.

#### **B.** The development crisis

The growth rates experienced by developing countries in the decades of the 1960s and 1970s tended to fall below their aspirations as well as the development targets established by the international community. In recent years, the divergence between targets and actual growth rates has widened and reached major proportions at the beginning of the Third United Nations Development Decade.

To be sure, the development problems facing individual developing countries are not always reflected in the growth rates of income achieved. For example, for several developing countries whose economies depend heavily upon the production and exportation of hydrocarbons, the problem is not one of achieving higher growth rates. In fact, for several of these countries, growth rates are determined at the margin by their decisions to change the composition of their wealth from oil in the ground to financial assets. The development problem that these countries face has been two-fold: *first*, to find outlets that will protect the real value of their financial assets and will ensure for them a reasonable rate of return and, *secondly*, to diversify domestic production.

For the majority of developing countries, however, the deceleration of growth rates observed in the recent period provides a broad indicator of their worsening economic situation. Seen in this context, the experience of net oil-importing developing countries has been particularly unfavourable. Their GDP growth rate is estimated to have been about 3.6 per cent in 1980; the indications are that for 1981 and 1982 this rate will be within the range of 4 to 5 per cent. When account is taken of population growth and the deterioration in the terms of trade, these rates imply, in fact, stagnant real per capita income over the period 1980–1982.

What is of particular concern is that this downward movement has impinged heavily upon investment programmes which, according to some evidence, appear to have been severely curtailed. This will reduce the capacity of many developing countries to achieve even the minimal structural changes required to sustain development in the current economic environment.

Another characteristic of the slower pace of development is that it tends to be unequally distributed among countries and income groups within countries, with the poor segments of the population bearing a disproportionately large part of the burden. Thus, when compared to the overall estimates of growth, the growth rates of the least developed countries and of the most seriously affected countries (MSAs) have been distinctly lower. In fact, current estimates indicate that 75 per cent of these countries will have experienced a negative growth rate in both 1980 and 1981. Moreover, although comprehensive statistics are not available, there is some evidence that the slower pace of development has shifted the distribution of income against the poorest income groups.

These developments reflect a variety of factors, some of them peculiar to the individual countries concerned. In all countries, however, unfavourable external factors - most of them beyond their own control'- have played an important role. Some indication of the magnitude of these factors is given by the evolution of the balance of payments of net oilimporting developing countries. The currentaccount deficit of these countries is estimated to have increased from \$45 billion in 1979 to about \$78 billion in 1981.<sup>4</sup> However, the full force of the unfavourable external factors was considerably greater, since the sharp increases in the current-account deficit occurred in spite of strong efforts by these countries to offset the adverse external conditions. The volume of imports of net oil-importing developing countries stagnated in 1979 and 1980 and is expected to increase only moderately in 1981. At the same time, many developing countries have made efforts to raise exports by diversifying both their export products and their export markets. Indeed, considering the slack in the demand of industrial countries, as well as protectionist policies affecting the exports of many manufactured items, the growth in the volume of exports by developing countries has been remarkably vigorous. This reflects the success of net oil-importing developing countries in penetrating new markets, including in particular the markets of developing countries themselves, and in placing new items on their export lists. Consequently, the annual rate of growth of the volume of their exports accelerated from 5.6 per cent in 1970-1975 to 9.0 per cent in 1975-1980, in spite of the slower expansion of world output and increased protectionism. Over the same period, the annual rate of growth of their imports fell from 4.6 per cent to 4.2 per cent.

A major factor underlying the sharp increases in current-account deficits has been the deterioration in the terms of trade of net oil-importing developing countries. For these countries, the terms of trade

<sup>&</sup>lt;sup>4</sup>The corresponding estimates for all deficit developing countries are \$45 billion in 1979 and \$96 billion in 1981.

deteriorated throughout the decade of the 1970s. This trend reflects the steady rise in world prices of manufactures in relation to those of primary products other than oil, and the two major adjustments in the price of oil.

In more recent years, higher interest payments and profit remittances have also made a sizeable contribution to the deterioration of the balance of payments of deficit developing countries. These payments amounted to \$34 billion in 1980 and are expected to rise to \$44 billion in 1981. This sharp increase reflects the rapidly rising outstanding external debt, which is now approaching the \$400 billion mark. A more important factor, however, has been the sharp rise in interest rates in capital markets. Since a considerable part of the debt owed to banks and other private parties is at floating interest rates, the recent increases in interest charges have affected not only new borrowing but also the cost of servicing a large part of the outstanding debt. It is estimated that an increase of one percentage point in interest rates in capital markets results in an additional annual debtservice cost of nearly \$2 billion for the developing countries.5

Reflecting partly the rapid build-up of the debt and partly the relatively short maturities and high interest rates of contracted loans, payments on account of interest and amortization have increased relative to other items in the balance of payments. Debt-service payments including profit remittances of deficit developing countries are expected to equal 28 per cent of their export earnings in 1981, as compared with 25 per cent in 1980. Interest and amortization payments have also increased sharply as a proportion of gross borrowing. Thus, net transfer (gross borrowing less debt-service payments) as a proportion of gross borrowing is estimated to be as low as 33 per cent in 1981. This means that an increasing proportion of new borrowing will have to be used for servicing old debt, leaving, as a consequence, an increasingly smaller share for financing new development programmes.

The rising debt-service ratios coupled with the deteriorating profile of debt liabilities and of net transfer largely explain the difficulties many developing countries now encounter in proceeding with external borrowing at the same rates as in the past. A number of developing countries are adopting more cautious policies with regard to their borrowing programmes. But unless there are offsetting substantial increases in official flows from multilateral and bilateral sources, the consequence will almost certainly be a further reduction in growth rates. The risk of severe debt-servicing difficulties will thus be reduced at the cost of the disruption of development programmes. A significant contribution that could be made towards avoiding this outcome would be for the industrial countries to relax their protectionist stance vis-à-vis developing countries. There exists indeed a paradoxical asymmetry in international relations which, on the one hand, requires

countries to honour their debt obligations and, on the other, permits creditor nations to hinder their doing so by restricting imports.

#### C. Changes in world trends and development prospects

The unfavourable world economic conditions are the result, to a large extent, of the economic situation of developed market-economy countries. The annual rate of growth of GDP for these countries as a group is estimated at about 1.5 per cent in 1981, with only a very moderate recovery in sight for 1982. This poor performance reflects the working of both cyclical and secular factors.

With regard to the cyclical factors, it must be noted that in the wake of price increases in 1979 and 1980 - reflecting, inter alia, the second major realignment of oil prices - the majority of developed market-economy countries chose to give priority to restrictive demand management in fighting inflation. While some moderation in price increases has been attained in 1981, the costs in terms of idle capacity and labour unemployment have been considerable; it is estimated that more than 24 million workers will be unemployed in 1981, as compared with 16 million in 1978. This policy-induced recession has had serious implications for the trading partners of these countries and in particular for developing countries. For reasons that are discussed in this report, the level of economic activity in the developed marketcountries remains the single most economy important factor in determining the export earnings of developing countries. As a result, the latter countries have a legitimate interest in seeing that the former maintain high levels of employment and economic activity.

Developing countries have also been concerned about the impact of the policy mix adopted by developed market-economy countries to counter inflationary pressure. Particular concern is expressed about the tendency to rely heavily on monetary policies. The high interest rates prevailing in capital markets can be directly traced to the policies pursued by the governments of some of the major developed market-economy countries.

The direct impact of high interest rates on the debt-service burden of developing countries has already been noted. In addition, high interest rates in themselves may contribute to inflationary pressures by raising production costs. Large oligopolies can be expected to pass on the higher cost of commercial loans to consumers in the form of higher prices, but firms that are unable to do so may have to reduce output, and some may be forced out of business altogether. The current restrictive policies, which have resulted in high interest rates, are predicated on the assumption that they will moderate inflation and provide adequate incentives for the revival of production. Thus, it is argued that reductions in expenditure combined with cuts in tax rates targeted at the corporate sector will stimulate business investment, thereby producing a fiscal dividend which will substantially reduce the size of public sector net bor-

<sup>&</sup>lt;sup>3</sup>High interest rates also have less direct effects on developing countries. They appear, for example, to have an adverse effect on commodity prices by inducing reductions in inventories.

rowing as a percentage of GNP. However, there can be no guarantee of a revival of business investment activity following a reduction in corporate taxes, and fiscal deficits might turn out to be larger than expected. This could, in turn, lead to further upward pressure on interest rates, costs and prices, with continued stagnation of output.

Clearly, such an outcome would have a severe impact on the economies of developing countries and would offset all other measures that might be taken internationally to enhance the development process.

As was noted earlier, the recent poor performance of developed market-economy countries cannot be entirely attributed to transient or policy-induced cyclical episodes. Long-term forces appear to be working in the direction of slowing down the secular growth of these countries. Thus, it cannot be expected that counter-cyclical policies would be able to move the economies back to the growth paths characteristic of the world economy in the 1950s and 1960s.

Indeed, the unprecedented growth rates that the economies of the OECD countries experienced in the post-war period until early in the 1970s appear to reflect the confluence of several factors that are unlikely to recur in the medium term. In the first instance, the labour force is projected to expand in the 1980s and 1990s at rates significantly below those experienced in the past. Secondly, these countries have become increasingly dependent upon external sources of raw materials, including energy. Thus, a rapid expansion in output would result in large trade imbalances which - given the supply conditions now prevailing in the world markets - would lead to strong upward pressure on prices. Improvement in the growth potential will therefore have to await the gradual removal of supply constraints through structural transformations, especially in the energy area, in line with the prevailing relative cost positions. Finally, the unprecedented growth of productivity in the post-war years contained to a large extent an element of catching-up on the part of Western Europe and Japan to the technological levels of the leading Western economy, the United States. It now appears that, at least for the decade of the 1980s, overall productivity growth rates may converge around the secular trend of about 1.7 per cent per annum. For all these reasons, it would seem that, if present policies are continued, the growth of the OECD economies in the 1980s may average only about 2.5 per cent per annum.

In the case of the socialist countries of Eastern Europe, prospects for the growth of the supply of labour are also less favourable in comparison with past experience. As a result, the growth rates of these countries in the 1980s may also slow down to some extent. Nevertheless, even at lower growth rates, the possibilities of rapid expansion of trade between the socialist countries and other countries – especially developing countries – are quite good.

China's economy continues to be relatively closed and consequently prospects of growth will be determined largely by its internal dynamics, which point to the possibility of a relatively fast pace of development. An external environment characterized by rapid growth of world trade would create conditions in which there were good prospects for the substantial expansion of China's trade with other countries.

Given the trends for the major industrial economies, the prospects for developing countries are bleak. Indeed, projections on the basis of the historical relationship of growth rates between the industrial countries and developing countries, and on the assumption of no major changes in trends and policies concerning trade and capital flows, suggest an annual growth rate for developing countries during the 1980s of the order of 4.5 per cent. Even on more optimistic assumptions about the growth rates of developed market-economy countries, the provision of additional capital flows to developing countries and more liberal trade policies on the part of the industrial countries, the projected annual growth rate for the 1980s amounts to only 5.7 per cent.

While exercises based on relationships derived from past trends provide a useful method for highlighting the implications of a continuation of those trends within the existing economic framework, they do not provide a basis for the consideration of alternative economic relationships. Yet the need for such consideration emerges directly from the social and political implications of the projected slow growth. Indeed, it has been estimated that the attainment of the 7 per cent growth target for developing countries envisaged in the new International Development Strategy will only marginally reduce their urban unemployment rate. Thus, even the scenario of 5.7 per cent growth mentioned above would imply sharply rising unemployment rates, especially in the urban centres, with all of the attendant social and political difficulties.

The upshot of all this is that international discussion concerning development objectives will have to be based on consideration of viable alternatives even when these entail far-reaching reforms in the system of international economic relations.

## D. Accelerating development in a world economy characterized by slow growth

If developing countries were enabled to accelerate their pace of development in line with their growth potential and the target envisaged in the International Development Strategy, their average level of per capita GDP would be, under optimistic assumptions, only some 15 per cent that of the developed market-economy countries by the year 2000, as compared with 9 per cent in 1980. This example serves to illustrate the fact that achieving a more balanced and equitable world distribution of per capita production and income is a task that will remain to be completed in the next century.

More rapid growth in developing countries in the face of the expected poor performance in developed countries would have tangible effects on the relative weights of developed and developing countries in aggregate world production over the medium term. Thus, under these assumptions, the share of developing countries in world output would increase from 15 per cent in 1980 to 25 per cent in the year 2000, while the corresponding share of developed market-economy countries would decline from 65 per cent to 50 per cent.

This process would significantly alter the dynamics of world growth and economic activity in the long run. Developing countries could exploit the immense possibilities of economic co-operation among themselves and become increasingly independent of circumstances in the rest of the world. The question that arises is whether this pattern of self-reliant growth would yield sustainable patterns of production, trade and finance in the long run. An examination of the possibilities along these lines indicates that a positive but qualified answer may be ventured.

Projections indicate that, in that event, trade among the developing countries would become an increasingly important component of world trade. This would not only reduce the dependence of developing countries on trade with the rest of the world but would also help to bring about a more balanced structure of world trade. Indeed, under these assumptions, the composition of their exports is projected to shift away from heavy dependence on primary commodities to manufactures. Thus, the share of manufactures in their total exports (including fuel) would increase from 18 per cent in 1975 to about 32 per cent in 1990. As a corollary of these trends, the trade balances in relation to total exports by broad commodity groups would also tend to converge, with the surplus on primary commodities being gradually reduced and the sizeable deficit on manufactures showing a decisive diminution.

The projected trade deficit as a ratio of total exports of developing countries shows a substantial increase in the earlier years but it begins to decline towards the end of the 1980s. However, because the GDP of developed countries is projected to increase more slowly, the trade gap of developing countries in relation to GDP of developed countries shows a substantial increase from 0.3 per cent in 1975 to 2.0 per cent in 1990.

These magnitudes are very large by historical standards and cannot be accommodated within the existing system of international financial co-operation.

#### E. Towards a new development paradigm

The foregoing suggests a situation in which a development alternative presents itself which will tend towards stability in so far as the internal dynamics of developing countries are concerned, but which may place inceasing pressures on the rest of the world in the form of transfer requirements that are not likely to be accommodated within the framework of the existing system. Thus, a paradoxical situation appears to exist whereby, on the one hand, low growth for developing countries is unsustainable from the point of view of their own social dynamics, while high growth for these countries is not feasible in the context of the existing international economic system. A reconciliation of these opposing forces is, however, possible at least from an analytical point of view. Such a reconciliation may be composed of several elements. First, the large transfer requirements can be significantly reduced by a substantial improvement in the terms of trade of developing countries through appropriate commodity policies.

Second, during the early phases of acceleration of the growth of developing countries, the process will have to be supported with financial transfers of an order of magnitude that may be beyond the capacity of the present financial system. The savings surpluses, however, appear to be available in developing countries, as a group, as well as in developed countries that are not expected to grow very fast. Major changes in expenditure patterns in developed countries, such as those that would accompany disarmament, would also generate savings that could be captured for development purposes. The problem, however, is not one of inadequate potential saving as such, but of finding new and more efficient financial mechanisms for matching savings and investment at the global level. In relative terms, however, the role of financial transfers would tend to diminish over time, as the structural transformation of developing countries gains momentum.

Third, the initial acceleration of growth would need to be followed by a comprehensive set of measures that would enhance the developing countries' own economic performance. This would need to be reflected in two areas in particular, namely, increased trade among developing countries over and above the increases projected, and a higher degree of import substitution, as large and more vigorous domestic markets allow this to proceed efficiently. The achievement of a better export performance is not simply a matter of trade policies, but will need to be complemented by substantially increased domestic saving rates and sustained improvement in overall economic management.

Reconciliation would also be facilitated by domestic policies in developed countries which foster the restructuring of the world industrial economy. Positive adjustment policies that would allow the reduction of protectionist measures against the exports of developing countries would be particularly beneficial.

A more supportive stance on the part of those developed countries whose performance with regard to access to markets and financial flows has been below the average for these countries would also be helpful. For example, an acceleration of exports from developing countries to the socialist countries of Eastern Europe, and the provision by the latter countries of larger financial and technical support, in the context of mutual economic co-operation, could play an important role in reconciling the opposing forces mentioned earlier.

Finally, the growth rate of developed countries in the 1990s and beyond may begin to accelerate somewhat again, partly as a result of the feedback effects which the growth of developing countries may have upon them. If this were to happen, then the task of reconciliation would be rendered much easier. These possibilities are, of course, by no means exhaustive but they present an illustration of the issues that may arise internationally if an accelerated pace of development in developing countries is taken as a priority issue and as a matter of mutual interest. It is clear that all these measures will require intensified international economic co-operation and concerted efforts by governments since "market forces" alone cannot be relied upon to achieve the required transformations and structural reforms.

The various parts of this report provide a technical analysis of the considerations discussed above. Part I sets out elements of the world economic outlook for 1981 and 1982 on the basis of simulations and data available as of June 1981. Part II reviews the structural changes that have taken place in the major groups of countries. The analysis is intended to assist in obtaining both a better understanding of the current development problems in the face of deteriorating world economic conditions as well as a more comprehensive assessment of development prospects. Part III examines the trends and changes that have taken place in the markets and selected sectors which have a bearing upon the process of structural change and the development prospects of developing countries. Finally, part IV includes a technical examination of the alternative development scenarios and focuses on the issues that arise when the development process accelerates while the rest of the world is assumed to grow relatively slowly.

## Part I

## CURRENT SITUATION AND SHORT-TERM PROSPECTS FOR THE WORLD ECONOMY

#### **INTRODUCTION**

This part of the report reviews developments in the world economy during the past two years and assesses the economic prospects of different regions in 1981 and 1982. Chapter 1 examines recent developments in commodity markets, the deterioration of the commodity terms of trade of developing countries and the unsatisfactory prospects for growth in export volumes. It also reviews developments in international finance, in particular the effect of higher interest rates on the balance of payments of developing countries. In chapter 2 the development prospects of developing countries in 1981 and 1982 are discussed in the light of prevailing world economic conditions and against the background of the slow pace of expansion in the previous years. This discussion is accompanied by a section describing the financing of current-account deficits and implications for debt and debt-servicing of developing countries. Chapter 3 provides a brief discussion of the current situation in developed market-economy countries, focusing on trends in output, employment, and inflation. The policy stances adopted in the major countries and certain aspects of their relationship to interest rates, capital flows, exchange rates and the balance of payments are also discussed. Chapter 4 contains a brief review of the current situation in the socialist countries of Eastern Europe and in China.

#### Chapter 1

#### THE INTERNATIONAL SETTING

#### A. The volume of trade

The international environment facing developing countries at the beginning of the 1980s is highly unfavourable. It is characterized by slow growth in the principal markets for their exports, weakening terms of trade, unusually high costs of borrowing on capital markets and prospects for a reduction in ODA flows in real terms. Moreover, the policy measures of developed market-economy countries to combat inflation have, as a side effect, aggravated the problems of developing countries.

The widespread slowdown in the rates of economic activity in 1980 was primarily responsible for a rate of expansion of world trade of only 1 per cent, the smallest annual increase since 1975. This outcome reflects a deceleration in the volume of trade in manufactures and raw materials and an absolute reduction in the volume of exports of petroleum.

In view of continued recession, world trade is expected to experience slow growth in 1981 as well. On the other hand, with the mild recovery in economic activity which is expected in 1982, the rate of growth of the volume of world exports is expected to increase by about 5 per cent in that year.

#### **B.** Prices of primary commodities and manufactured exports

World prices of most primary commodities rose less than prices of manufactured exports in 1980, and prices of several commodities actually fell. The commodities most adversely affected by the weakening of world demand include tropical beverages, vegetable oils and oilseeds, jute and several non-ferrous metals, particularly lead and zinc.

There were a few exceptions to this generally unsatisfactory picture. One was sugar, whose price nearly trebled between 1979 and 1980 owing to supply shortages occasioned by hurricane damage and poor crop conditions in several countries. Another was phosphates, for which prices increased by over 40 per cent.

The terms of trade for most primary commodities vis-a-vis manufactures may register further, albeit small, declines in 1982 and improve only marginally thereafter. As may be seen from charts 1 and 2, basic food and agricultural raw materials are expected to undergo little change in their terms of trade. Of the other food products, tropical foodstuffs may experience the most serious terms-of-trade declines. In fact, the terms of trade of these products in 1982 are expected to be nearly as low as in 1975, which was the most depressed level of commodity prices during the entire decade of the 1970s. The terms of trade of minerals and metals are not expected to worsen much further, but their average level in 1982 is expected to be about the same as in 1978 which was the lowest level during the 1970s.

The maintenance of relatively high levels of oil consumption during 1979, together with a faster rate of stockbuilding as compared with the previous year, led to an increase of more than 5 per cent in the volume of oil imported by developed marketeconomy countries. These trends in demand, combined with the drop in oil exports from Iran, propelled spot market prices sharply upwards. From

#### TABLE 1

#### Current account balances:<sup>a</sup> major countries and country groups,<sup>b</sup> 1979-1982 (billions of US dollars)

	1979	1980	1981	1982
Developed market-economy				-
countries	- 10.8	-49.7	- 30.8	- 12.2
North America	0.1	4.7	8.0	1.3
of which:	0.1		0.0	1.5
United States of				
America	4.6	6.5	12.4	1.7
Western Europe	-1.6	-43.7	-36.4	-14.5
of which:	1.0	-45.7	50.4	14.5
France	2.8	- 8.0	-4.4	-1.0
Germany, Fed. Rep. of	-0.4	- 8.3	- 8.7	0.1
Italy	8.0	-11.0	-8.6	-2.4
United Kingdom	1.0	10.0	15.6	6.4
Japan	- 7.9	-9.6	1.3	1.2
Other countries	- 1.4	-1.1	- 3.7	-0.2
Developing countries and				
territories	15.8	33.0	4.9	2.7
Countries with current-				
account surpluses <sup>c</sup>	60.6	116.0	101.2	106.8
Countries with current				
account deficits	- 44.7	- 83.0	-96.3	- 104.1
of which:				
Net oil-importing				
countries	-45.4	-68.0	- 77.7	- 80.9
Exporters of				
manufactures	-21.9	- 32.3	-37.9	- 36.9
MSA countries	-13.4	- 22.2	-24.6	- 26.6
Least developed				
countries	-4.5	-4.8	- 5.8	-7.0
China	-1.4	-1.2	-0.5	-0.0
Socialist countries of				
Eastern Europe	- 0.7	-0.2	2.2	2.7
Statistical discrepancy	- 2.9	- 18.1	- 24.2	-6.8

Source: UNCTAD secretariat calculations, based on official national and international sources.

<sup>b</sup> For country classifications, see Annex A.

<sup>c</sup> Includes all countries with current-account surpluses in two of the four years shown.

<sup>&</sup>lt;sup>a</sup> Goods, services and private transfers.





Source: UNCTAD, Monthly Commodity Price Bulletin.

mid-1979 to mid-1980 official sales prices followed suit, with the result that the average level of export prices of eleven major oil-exporting developing countries vis-a-vis prices of exports of manufactures from developed market-economy countries in 1980 was 88 per cent higher than the average in 1978.

Partially in response to the increase in the relative price of energy but also because of the slowdown in economic activity, both consumption and imports of oil exhibited substantial declines in 1980 and 1981. Combined with the increased production levels, the reduction in demand has led to a softening of prices, which have risen at about the same rate as the prices of exports of manufactures since mid-1980.

Barring further interruptions in the supply of petroleum, the immediate prospects are for a return to more orderly conditions in international oil markets in 1982, with petroleum prices increasing perhaps slightly more than the prices of manufactured exports, accompanied by some reduction in the output of major oil exporters in strong balance-ofpayments positions.

The dollar-denominated price index of manufactured exports from developed market-economy countries rose by 10.5 per cent in 1980, somewhat less than in the preceding year. It is likely that the index will rise less in 1981 in response partly to the abating of inflationary pressures in the main exporting countries but mainly because of the appreciation of the US dollar.

#### C. Payments imbalances and international capital markets

In 1979 and 1980 changes in commodity prices dominated changes in the pattern of surpluses and deficits on current account among major countries and country groups, as may be seen from table 1. Despite some acceleration of import volumes on the part of oil-exporting developing countries and some reduction in the growth of the volume of oil imported by other countries, the payments surplus of oil-exporting developing countries increased by about \$60 billion in 1979 and by a further \$42 billion in 1980. More than three-quarters of these increases had their counterpart in increased current-account deficits of developed market-economy countries, which could easily obtain the required finance from private capital markets.

Despite the relatively liquid position of capital markets, interest rates, as measured by the threemonth LIBOR on US dollar deposits, moved erratically but with a strong upward trend from the second half of 1979 to reach an average of 17 per cent in the first half of 1981. This development was influenced by the highly restrictive monetary policy pursued in the United States.

This prolonged period of high interest rates had several consequences, the most obvious of which was the impact on exchange rates, resulting in a considerable appreciation of the US dollar. Another major effect has been to place additional pressure on the heavily indebted countries, whose previous deficits were financed to a very great extent with loans subject to variable interest rates. Finally, liquid funds have no doubt been shifted from commodity markets to financial markets to take advantage of high interest rates, thus increasing the downward pressure on prices in the former.

#### Chapter 2

#### **DEVELOPING COUNTRIES**

#### A. Recent developments and prospects for economic growth in 1981–1982

During the years 1976-1978, net oil-importing developing countries made efforts to adjust to the conditions created by the recession of 1974-1975 and to the deterioration in their terms of trade. Owing to constraints on the types and amount of finance available to support the adjustment process, most countries had no choice but to reduce their growth rates significantly below those which they attained during the period 1960-1973. In 1979-1981 there was a further deceleration in GDP growth due largely to an increase in the severity of the balanceof-payments constraint as may be seen from table 2. As shown below, this was brought about largely by the combined effect of slow growth in the volume of their exports due to recession in the developed market-economy countries, which is discussed in chapter 3, and a pronounced deterioration in their terms of trade caused largely by increases in import prices of manufactures and energy.

#### TABLE 2

World output a by major regions (percentage changes)

	1975-	1979	Estimate	Forecasi	
	1980		1980	1981	1982
GDP					
World	4.0	3.8	2.1	2.2	3.0
Developed market-economy					
countries	3.5	3.6	1.2	1.5	2.2
North America	3.4	3.2	-0.2	2.5	1.5
Western Europe	3.0	3.3	1.5	-0.4	2.0
Japan	5.6	5.9	4.3	3.5	4.5
Others	2.1	4.0	2.2	5.1	4.6
Developing countries	5.0	4.8	3.8	3.2	5.5
Major oil-exporting			1 1		
countries	3.7	4.0	-5.5	-2.0	6.0
Net oil-importing					
countries	5.0	4.7	3.6	4.5	4.8
Exporters of					
manufactures	6.1	7.1	4.8	5.1	5.2
MSA countries	3.5	1.4	1.8	3.4	4.0
Least developed					l
countries	3.8	2.5	2.7	2.9	3.6
China	4.9	7.0	5.0	4.5	5.0
Socialist countries					
of Eastern Europe	4.3	2.5	2.9	3.2	3.5
-					
Memo item					
Unemployment rates in		<i>с</i> .			1
OECD countries <sup>b</sup>		5.1	5.8	6.4	6.9

Source: UNCTAD secretariat calculations, based on official national and international sources.

a Gross domestic product.

<sup>b</sup> Standardized unemployment rates in fifteen OECD countries.

Severe balance-of-payments pressures forced many countries to take restrictive policy measures such as reducing the rate of growth of government expenditures. In 1980, for example, at least 18 developing countries reduced the rate of growth of government expenditures in real terms. In eight developing countries, such measures resulted in a reduction in the level of government expenditures in real terms.<sup>6</sup> An indication of the magnitude of the external payments problem is provided by the growing number of countries that have renegotiated their external public and publicly guaranteed debt. There were 11 such countries in the period running from 1978 to the first half of 1981 compared with 7 in 1970–1977. Of this group, 8 were MSA countries, least developed countries or countries with a per capita income of less than \$600 in 1978. Without exception, all of these countries had introduced strongly deflationary policies or pledged to do so in order to reduce their current-account deficits and resume debt-service payments.

As shown in table 2 and annex table A.1, there were marked differences in the growth performance of different groups of countries. Generally speaking, the rate of growth of GDP in net oil-importing countries was less than 4 per cent in 1980, lower than that of major oil-exporting countries (leaving out of account the latter's oil sector). Within the group of net oil-importing countries, middle-income exporters of manufactures with access to foreign capital markets performed better than average, with a GDP growth rate of 4.8 per cent in 1980. At the other extreme, the MSA and the least developed countries which experienced even greater pressure on their balance of payments, had considerably lower-thanaverage GDP growth rates. In 1979-1980, GDP growth averaged less than 2 per cent and about 2.6 per cent in the MSA and least developed countries, respectively. Poor harvests were also partly responsible for these relatively low rates of growth. For example, of 50 countries in these two groups at least 26 experienced unfavourable crop conditions during 1980. At present, the situation in the agricultural sector appears to be somewhat more favourable since only 10 countries are expected to face poor crop conditions in 1981. Nevertheless, an additional 11 countries are suffering from food shortages owing to the lack of sufficient carry-over from previous years, inadequate transport with which to distribute imported food, and an increase in the number of refugees or dislocated persons.

<sup>&</sup>lt;sup>6</sup>Of 26 developing countries for which information was published by the IMF in *International Financial Statistics*, June 1981, 20 of them either reduced the rate of growth or the absolute level of government expenditure in real terms.

With the decline in rates of growth of economic activity, the rate of growth of investment can be expected to fall as well. In general, deceleration in GDP growth adversely affects investment in the private sector. Moreover, increases in interest rates and quantitative credit restrictions, and delays in obtaining import licences which are usually assowith balance-of-payments difficulties ciated increase costs and tend to further discourage investment. Moreover, reductions in government expenditures tend to fall disproportionately on capital outlays. That the pace of investment in non-oil exporting developing countries has fallen can be inferred from the trade data on exports of machinery and transport equipment from developed marketeconomy countries to developing countries. During the four-year period 1976-1980, the growth rate of such exports in real terms has averaged less than 4 per cent per year, in contrast to an average rate of 9 per cent during the period 1970-1976.

The continuation of recessionary conditions prevailing in the world economy will make it difficult for any group of developing countries to improve its growth performance in 1981. A slightly improved performance is projected for 1982, reflecting the effect of the expected moderate upturn of world output and trade.

#### B. Trade balances and terms of trade

Rates of growth of the volume of exports from developing countries, which fell markedly in 1980 for most groups of countries, are expected to fall further in 1981 and to recover somewhat in 1982, as may be seen from annex table A.2, in line with the general evolution expected for world trade as a whole. Regional differences in the general pattern are, however, quite pronounced. Thus, countries identified as major oil-exporting countries and the two geographical groups whose trade is dominated by petroleum exports, West Asia and North Africa, registered large absolute declines in export volume in 1980. Smaller declines in the export volumes of these countries are expected in 1981, but they may be followed by modest increases in 1982.

Fast-growing exporters of manufactures, which dominate trading patterns in East Asia, are expected to achieve rates of growth in export volumes in 1981-1982 that are considerably higher than the average, but nevertheless markedly lower than those experienced during the period 1970-1979.

Growth in export volumes in the Western Hemisphere in 1980 was also higher than the average for all developing countries. This development was, however, due almost entirely to the large increases of 22 per cent and 24 per cent registered respectively by Brazil and Mexico. Four other countries, with much smaller economies, experienced a growth of more than 7 per cent in export volumes. No fewer than 14 actually registered declines in 1980.

In South Asia the rate of growth of export volumes declined dramatically in 1980, reflecting, primarily, a slower growth of India's exports. In most countries of this region the rates were lower than in 1979. Low export growth is expected to continue in 1981, with some improvement likely in 1982.

Least developed countries, the majority of which are located in sub-Saharan Africa, recorded growth rates in export volumes in 1980 that were considerably lower than those of other net oil-importing developing countries and lower than their own performance in 1978 and 1979. This was due to weak world demand for cotton and coffee, which constitute about 50 per cent of the exports of these countries.

The widespread declines in the rates of growth of export volumes in 1980 were accompanied by declines averaging about 6 per cent in the terms of trade of most groups of developing countries, and declines of about 4 per cent are expected in 1981. Countries whose exports were essentially tropical beverages, oils and fats, jute and non-ferrous metals have all been subjected to greater-than-average terms-of-trade declines during the 1980-1981 period, since prices of those commodities in relation to prices of manufactured exports fell considerably. Prices of cereals and petroleum, on the other hand, which account for a large share of the imports of those countries, increased at rates equal to or greater than the prices of manufactured exports. Among the country groups experiencing major deteriorations in their terms of trade were the MSA and least developed countries. Countries for which sugar is a major export commodity benefited from large price increases in 1979 and 1980, which are not expected to be entirely reversed by the decline in 1981.

The combination of declining rates of growth in export volumes and deteriorating terms of trade resulted in low rates of growth for the purchasing power of exports in the case of most groups of developing countries and even in absolute declines for several of them. Lower-income countries, particularly the least developed countries, are expected to experience declines in the purchasing power of exports in 1981 for the third successive year. Similarly, in the Western Hemisphere net oil-importing countries experienced a 4 per cent decline in the purchasing power of their exports despite the exceptionally large increase in the volume of exports from Brazil. On the other hand, exporters of manufactures suffered reductions in the growth rate of purchasing power of exports in 1980 and 1981 compared with the period 1975-1979.

The response of the developing countries to the growing pressure on the balance of payments has taken several forms, but three basic strategies have been pursued singly or in combination. Most developing countries have taken steps to reduce the rate of growth of import volumes. Many have made strenuous efforts to increase the share of exports in GDP; and a number of them have sought to increase the net flow of capital both to sustain minimum import levels and to finance the additional investments required by their efforts to make structural adjustment.

A combination of these policies has been most evident for the major exporters of manufactures and for the countries of East Asia. The strategy of these countries might be described as one of increasing the

share of exports in GDP much more rapidly than that of imports. During the decade of the 1960s, export volumes and GDP of these countries grew roughly pari passu, in both cases exceeding the rate of growth in import volumes by about 1 per cent. During the present decade growth of export volumes has exceeded that of import volumes by almost 2 per cent annually. This transition was facilitated for many of them by increased access to international capital markets since their rapid rate of growth of export volumes enhanced their creditworthiness. Most other developing countries, some of which managed to finance shortfalls in export earnings for a time by borrowing, were unable to expand export volumes owing largely to the depressed state of world demand, unfavourable weather, which reduced the growth of agricultural output, and The widespread social and political tensions. response of these countries has perforce taken the form of a sharp reduction in import volumes, with adverse consequences for future development.

This latter pattern can be seen most clearly in the figures for MSA and least developed countries, but was true, broadly speaking, for most net oilimporting developing countries, as may be seen from chart 3, which depicts the interrelationships of growth in export volumes, the purchasing power of exports, import volumes and GDP for three groups of developing countries. Thus, net oil-importing countries reduced the growth of import volumes to 1 per cent in 1980. In 1981 and 1982 higher import levels are expected, but probably not beyond 3-4 per cent. Fast-growing exporters of manufactures are expected to be able to maintain higher rates of growth in import volumes, averaging about 5 per cent per year in 1981–1982. Because of the markedly lower growth in the purchasing power of their exports and the limited access to international capital markets of most of them, MSA countries are expected to experience a growth of only about 1 per cent per year in import volumes. The least developed countries, which suffered an aggregate decline in their import volume of 10 per cent in 1980, are expected to exhibit low real growth of imports in 1981 and 1982. This projection assumes no major increase in concessional flows of assistance to the least developed countries and underlines the urgency of implementing the Substantial New Programme of Action for the 1980s for the least developed countries which is to be elaborated and finalized at the United Nations Conference on the Least Developed Countries in September 1981.

#### C. The balance of payments

For developing countries as a whole, the balance of payments on current account swung from a sizeable deficit in 1978 to a surplus of \$16 billion in 1979 and \$33 billion in 1980. Considerable reductions in this overall surplus are expected in 1981 and 1982. This overall movement is, however, associated with large increases in the current-account surpluses of several countries, and large increases in the deficits of most others.

As may be seen from annex table A.6, the surpluses are accounted for by major oil exporters and

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are primarily due to the large increases in oil revenues that occurred in 1979 and 1980. Even though the export volumes of these countries have fallen substantially and are expected to resume only slow growth in 1982, while import volumes are expected to increase at a rapid rate, the persisting effect of a major improvement in their terms of trade will continue to offset partially these changes in the volume of traded goods. In the absence of a significant recovery in the world economy, their surpluses are likely to be smaller in 1981-1982. Another factor tending to reduce these surpluses is the negative balance on non-factor services and private transfers, which is expected to increase substantially. However, this trend is expected to be offset somewhat by an increase in the positive balance on investment income. Thus the surpluses of these countries, which were about \$110 billion in 1980, are expected to be about \$94 billion in 1981 and to decrease slowly after 1982.

Net oil-importing developing countries as a group experienced a rapid rise in their current-account deficits during 1979 and 1980, which reached a level of \$68 billion in the latter year. As may be seen from annex table A.6, exporters of manufactures accounted for nearly half the deficits of this group of countries, which were financed largely through direct private investment, suppliers' credit and borrowings on international capital markets. The deficits of MSA countries and least developed countries increased relatively more than those of other countries and accounted for about 30 per cent of the total deficit of net oil-importing countries. Notwithstanding the improvement in their terms of trade, a number of net oil-exporting developing countries also recorded current-account deficit, totalling about \$15 billion. The aggregate deficit of developing countries with current-account deficits thus amounted to about \$83 billion in 1980.

In 1981, this deficit is expected to increase to about \$96 billion, of which the net oil-importing countries are expected to account for about \$78 billion, while the deficits of several net oil-exporters will account for the remainder. In 1982 the deficits of developing countries are expected to rise by a smaller amount, owing to a continuation of policies designed to restrain imports in the light of only a mild improvement in export prospects. The increases in the current-account deficits of net oil-importing developing countries in particular are explained mainly by the declines in the rates of growth of export volumes accompanied by a sustained deterioration in the terms of trade. But large and growing deterioration with respect to net investment income due to the high levels of debt incurred in recent years also will contribute to the current-account deficits of most developing countries. The increase in the average level of interest rates<sup>7</sup> on debt subject to variable interest rates from 8.7 per cent in 1978 to 17.4 per cent in 1981 as a consequence of restrictive monetary policy, principally in the United States, means that interest payments on medium and longterm debt in 1981 will be \$13 billion higher than they would have been if interest rates had remained at the

<sup>&</sup>lt;sup>7</sup>Three-month London inter-bank offer rate (LIBOR) on US dollars.

#### CHART 3

Adjustment of import volumes to export purchasing power: selected groups of net oil-importing developing countries, 1970-1982(Index numbers, 1975 = 100)



Source UNCTAD secretariat, based on international and national sources

levels prevailing in 1978. By 1982 the deficit on net investment income account is expected to reach nearly \$45 billion and to account for more than onethird of the current-account deficit of developing countries other than major oil exporters.

#### TABLE 3

Developing countries with current-account deficits:<sup>a</sup> Net capital flows, debt service and debt-service ratios, 1979-1982 (billions of US dollars)

	1979	1980	1981	1982
Current account deficit	52.3	77.8	88.6	94.3
Increase in official reserves	8.2	-1.2	- 5.1	4.4
Total net capital flows	60.5	76.6	83.5	98.7
Official bilateral flows on	00.5	, 0.0	05.5	/0.7
concessional terms	11.0	11.8	13.3	15.0
Grants <sup>b</sup>	7.1	7.1	8.0	9.0
Medium and long-term	,	/.1	0.0	7.0
bilateral loans on				
concessional terms	3.9	4.7	5.3	6.0
Other medium and long-	5.5		5.5	0.0
term official bilateral				
loans	1.9	2.7	3.0	3.3
Multilateral institutions	7.2	9.7	10.7	12.0
Private medium and	/.2	, ,,,	10.7	12.0
long-term flows	40.7	35.7	46.0	52.5
Direct investment	11.6	6.4	9.0	10.0
Export credits	4.9	4.0	4.5	5.0
Bilateral portfolio		4.0	4.5	5.0
investment	6.2	6.4	6.5	6.5
Other international bank	0.2	0.4	0.5	0.5
	18.1	18.8	26.0	31.0
IMF lending (net)	0.6	10.0	7.2	7.2
Short-term capital,	0.0	1.0	1.2	1.2
unrecorded flow and				ł
errors and omissions	-0.9	15.7	3.3	8.7
Total interest <sup>c</sup> and profit	-0.9	15.7	3.5	0./
remittances	24.0	33.7	127	19 5
Net transfer	37.0	43.5	43.7 45.3	48.5 45.5
Memo item:	37.0	45.5	45.5	45.5
Debt outstanding, end of				
period <sup>d</sup>	280.0	326.6	388.9	449.1
Debt service	280.0	520.0	300.9	449.1
Medium and long-term loans	50.5	65.1	81.4	94.4
Short-term <sup>e</sup> and IMF	50.5	05.1	01.4	94.4
lending	2.0	2.0	3.0	4.5
Total loans	52.5	67.1	5.0 84.4	98.9
Profit remittances	6.5	7.5	8.0	8.5
	0.5	1.5	0.0	0.5
Debt service plus profit remittance	59.0	74.6	92.4	107.4
	39.0	/4.0	92.4	107.4
of which: Amortization	33.0	38.9	45.7	54.4
	33.0	30.9	45.7	54.4
Ratios (percentages)				
Medium and long-term				
loans outstanding to	112.2	107.1	110.0	110.0
exports <sup>f</sup>	113.2	107.1	118.9	119.0
Interest on medium and				
long-term loans to	7.1	0 2	10.9	10.0
exports	7.1	8.6	10.9	10.6
Debt service plus profit	22.0	245	20.2	20 5
remittances to exports	23.9	24.5	28.3	28.5

Source: UNCTAD secretariat calculations, based on international sources.

a Excluding major oil exporters.

<sup>b</sup> Excluding technical assistance

<sup>c</sup> Balance-of-payments basis; does not include interest on short-term debt or on IMF drawings.

<sup>d</sup> Medium and long-term only, including IMF drawings outstanding.

e Interest only.

f Goods and services.

## D. Implications for financing the current-account deficits of developing countries, 1979-1982

The sources of finance for the deficits of developing countries and the implications for their external indebtedness and the burden of debt service are shown in table 3. While international capital markets will continue to play a major role in the financing of these deficits, a significantly larger portion will be financed from an increase in official flows through the International Monetary Fund. Official funds from other sources, particularly on concessional terms, are unlikely to increase very much.

In recognition of the urgent need for additional balance-of-payments finance, particularly for developing countries which have only limited access to international financial markets, the International Monetary Fund has embarked on a substantial expansion of its lending activity. Thus, total drawings on the Fund, which had reached SDR7.0 billion in 1976 and had fallen to SDR1.8 billion in 1979, increased to SDR3.8 billion in 1980. During 1981 drawings amounted to SDR1.5 billion in the first quarter alone. In view of the size of undrawn balances in connexion with agreements under the upper credit tranche facilities reached by end-April 1981, total drawings might reach SDR8.0 billion, thus surpassing in nominal terms amounts drawn in 1976. Against these drawings must be offset repayments on earlier drawings, which are occurring at an annual rate of SDR2.0 billion. Thus, net lending by the Fund in 1981, the bulk of which is to be provided to net oil-importing developing countries, could reach SDR6.0 billion. The full implementation of the quotas agreed under the Seventh General Review together with the borrowing arrangement recently entered into by the Fund with several member countries suggest that a similar volume of lending could be sustained in 1982.

The flow of official development assistance from DAC countries is unlikely to increase as much. During the two-year period 1979-1980, ODA flows to all recipients increased by more than \$6.7 billion, to reach a level in 1980 of \$26.7 billion. About \$1.7 billion of the increase was in the form of technical assistance. Despite the efforts of some donors to increase their ODA as a proportion of GNP, the fact that two major donors are in the process of reducing foreign aid appropriations is expected to lead to increases in net disbursements of only \$2-\$3 billion per year in the near future. OPEC member countries increased their contributions by nearly \$3 billion between 1979 and 1980. If these countries continue to increase their level of support in the near future, an additional annual amount of \$1-\$2 billion can be expected from this source.

Official export credits, which increased by \$2 billion in 1979 and \$1.3 billion in 1980, might increase by about \$1 billion per year during the next few years. Thus, official flows with varying degrees of concessionality and conditionality might increase by as much as \$10 billion per year in 1981 and 1982, financing most of the increases in the deficits of developing countries. Such flows would, however, finance only about 40 per cent of the total currentaccount deficits of developing countries. Financing the remainder would require a continuation of the current level of borrowing from international capital markets (although would represent a reduction in real terms).

Because a large number of countries in balanceof-payments difficulties will have to resort to import restraint rather than further borrowing, the total outstanding and disbursed debt of developing countries other than major oil exporters is expected to increase in 1981 and 1982 at about the same rate as total export earnings. The total outstanding medium and long-term debt of these countries is expected to increase from about \$327 billion at the end of 1980 to about \$450 billion by the end of 1982. Inclusion of short-term debt, information on which is extremely tenuous, could add as much as \$100 billion to this figure. The net outstanding and disbursed medium and long-term debt of major oil exporters is also quite substantial in absolute terms, although small when compared with their export earnings. Inclusion of this debt, which is expected to reach \$100 billion by 1982, would lead to a projection for the net outstanding and disbursed medium and long-term debt of all developing countries of \$550 billion by the end of 1982.

By and large, the major oil-exporting developing countries that are expected to have current-account deficits in 1982 or soon thereafter are in a good position to finance their needs by continued borrowing, since debt service currently absorbs only a small portion of their export earnings. Other developing countries are expected to experience considerable pressure on their balances of payments from their large debt burden. Owing to the recent increase in interest rates on international capital markets, debt service plus profit remittances are expected to absorb close to 26 per cent of export earnings in 1981. Since most, if not all, of payments of principal falling due are likely to be financed by new loans or a rescheduling of outstanding loans, a better measure of the burden of financing the accumulated debt is the ratio of interest payments to exports. If interest on medium and long-term loans only is taken into account, those payments are expected to account for about 11 per cent of export earnings in 1981 and 1982, compared to 7 per cent in 1979.

#### Chapter 3

#### **DEVELOPED MARKET-ECONOMY COUNTRIES**

#### A. Output, prices, and employment

The slow and irregular recovery from the severe 1974-1975 recession began to lose considerable momentum during 1979. Governments responded to mounting inflationary pressures, reflected in sharp rises of consumer prices in 1979, by adopting restrictive economic policies with emphasis on monetary instruments. Fiscal policy also was cautious. These policies resulted in very high interest rates which adversely affected investment, particularly in the housing sector. Consequently (as can be seen from annex table A.1), GDP growth slowed to very low levels in 1980 and the first half of 1981 amidst evidence of mounting unemployment. The most pronounced drop in output occurred in the United Kingdom, where GDP recorded a decline of more than one percentage point. The United States also experienced an absolute decline in real GDP, while other OECD countries witnessed a deceleration in growth rates.

1981 is likely to be a year of mixed growth performance, with a slight acceleration of GDP growth in the United States and a deceleration in France and Japan, while real output may decline in the several major European countries.

Cyclical upturns in economic activity in 1982 in several countries are at present expected to result in an increase in the rate of growth of GDP of the OECD countries as a group, which will nevertheless be substantially lower than in previous recovery years. The improved outlook for 1982 is linked partly to the impact of newly established policies in some countries to improve the employment situation and to measures taken by other countries for other purposes but which, as a side effect, may serve to stimulate effective demand. In several countries, policy makers are now placing emphasis on employment as a priority issue. In France, for example, reducing the rate of unemployment has become the principal policy objective.

In the United States, it has become public policy to reduce the share of taxes and government expenditures in total output, but to increase defence spending at the same time. Thus, personal income tax rates are to be reduced, while capital depreciation allowances are to be made more generous, and expenditure on social programmes are to be reduced. The practical effects of these policies can be expected to strengthen domestic demand. In the case of Japan, the Government recently announced a package designed to stimulate domestic demand. Included in this package are the speeding-up of the implementation of public works, bolstering aid to small and medium-size industries, lowering reserve requirements for Japanese banks, boosting housing construction and easing credit terms for developing countries which import Japanese capital goods.

Despite the slowing down of economic activity, inflation accelerated in 1980. As measured by consumer prices, the rate of inflation rose by 13 per cent in 1980 for the OECD countries as a whole compared with a figure of 9.8 per cent in 1979 (as may be seen in annex table A.3).<sup>8</sup> These increases were affected by a realignment of oil prices and policy measures taken in a number of countries which had a once-and-for-all effect on the price level. <sup>9</sup>

Inflation is expected to ease by two to three percentage points during the period 1981–1982, mainly as a result of softening markets for petroleum, raw materials and foodstuffs.

The slow pace of economic expansion in 1980, however, adversely affected unemployment rates, which continued to remain high or increased in most OECD countries. In the United Kingdom and the United States they increased to 7.4 per cent and 7.1 per cent respectively. Alongside of low investment and high unemployment rates, labour productivity in most OECD countries failed to improve and may even have registered declines in the second half of 1980.

The restrictive monetary policies adopted by some major industrial countries have had a destabilizing effect on exchange rates and have, in addition, compelled other developed market-economy countries to raise interest rates. A case which has attracted attention because of its worldwide implications was the restrictive monetary policy and the ensuing high interest rates in the United States. Rates of interest in the United States also fluctuated widely during 1980, as may be seen from chart 4.<sup>10</sup> These movements reflected not only changes in real economic activity but also the impact of the fiscal and credit policies introduced during the year. <sup>11</sup>

<sup>11</sup>An additional factor accountable for the large fluctuations of interest rates in the United States may have been the change in the

<sup>&</sup>lt;sup>8</sup>Among the major countries, Italy recorded the fastest rate of increase in consumer prices (about 21 per cent), followed by the United Kingdom (18 per cent), while Japan and the Federal Republic of Germany registered rates of inflation of less than 10 per cent.

<sup>&</sup>lt;sup>9</sup>For example, in the United Kingdom, the value-added tax was increased in June 1979, and other indirect taxes were increased in March 1980; strict rent controls were relaxed in Italy; and in the United States the interest rate ceilings on mortgages issued by savings and loan associations were removed.

<sup>&</sup>lt;sup>10</sup>The prime rates, for example, went from 15.3 per cent in January to 19.5 per cent in March only to fall back to 11 per cent in July. They rose subsequently to 21.5 per cent in December.





Source: Morgan Guaranty Company of New York: World Financial Statistics.



CHART 5 Effective exchange rates in selected financial markets, 1979-1981

Source: IMF, International Financial Statistics.

The volatility of interest rates in the United States has been an important factor behind the marked movements in exchange rates. Relatively high rates of return on dollar-denominated assets induced increases in the demand for dollars and consequently exerted pressure on other currencies. As a result, the effective exchange rate of the dollar improved. Indeed, as may be seen from chart 5, interest-rate differentials and the effective exchange rate of the dollar were closely correlated during 1980. In the light of the high interest rates prevailing in the dollar market, countries had either to let interest rates in other markets rise pari passu with the interest rates on dollar deposits or to pursue independent policies and risk the possibility of large capital outflows and consequently pressure on the exchange rate. In the event, interest rates in most developed market-economy countries increased in line with dollar rates in early 1980. There were, however, exceptions to this tendency. The strength of the French franc permitted the authorities to follow a relatively independent domestic policy and interest rates declined slowly from the peaks reached during the early part of 1980. There was also a softening of interest rates in Japan concomitant with the strengthening of the yen, as the country's external payments position improved markedly during the second half of 1980. The strength of sterling also offered the authorities in the United Kingdom a degree of monetary autonomy, but rates were kept high in order to control the growth of the money supply in an attempt to counter strong inflationary tendencies.

In early 1981 many European currencies began to weaken. This was particularly the case with the Deutschmark, as a result of the adverse balance-ofpayments position of the Federal Republic of Germany. The weakened position of the Deutschmark, a key currency in the European Monetary System (EMS), exercised a downward pressure on the other currencies in the EMS as well. This finally led to a sharp tightening of monetary policy in the Federal Republic of Germany during the first quarter of 1981, which resulted in some strenghtening of the currency but also in high interest rates, not only in the Federal Republic but also in other continental western European countries.

Many observers regarded the resulting dearness of money as unwarranted in view of the prevailing high levels of unemployment. Particular concern was expressed that high interest rates would affect capital formation and thus set back the process of badlyneeded industrial restructuring. The high interest rates observed during recent months may also have discouraged commodity stockholding and thus contributed in the short run to weakening primary commodity markets. They have, of course, added to the debt-servicing burden of debtor countries, and increased the pressure on the balance of payments of developing countries.

#### **B. Trade and current-account balances**

The balance of payments on current account for the developed market-economy countries as a whole recorded a deficit of around \$50 billion in 1980, which represented a large deterioration compared with 1979. The factors underlying the changes in the trade and current-account positions of OECD countries are diverse, and the resulting external positions of individual countries had a direct bearing on developments in the fields of international money and finance, as was seen earlier. Moreover, the balance-of-payments difficulties of major countries rekindled protectionist pressures among OECD countries.

The improvement in the payments position of the United States in 1980 is partly attributable to the country's fast export growth, helped by the effect of a depreciating dollar from 1974 through 1979. Moreover, the volume of imports into the United States is estimated to have fallen in 1980 largely because of the drop in economic activity during the year. The restrictive demand policies pursued in the United Kingdom have, as in the case of the United States, depressed the rate of growth of imports. To this, however, should be added the benefits of increased output of North Sea oil and the improved terms of trade due to the appreciation of sterling.

Both the Federal Republic of Germany and Japan suffered from adverse terms of trade in 1980. Japanese exports, however, are estimated to have increased at a very fast rate (over 18 per cent in terms of volume) in 1980. Thus, whereas the trade surplus of the Federal Republic of Germany declined by about \$7 billion from 1979 to 1980, the surplus of Japan actually recorded a slight increase during this period. Both countries are exporters of sophisticated capital goods competing in the same markets, especially those of the fast-growing developing countries. Developments in 1980 suggest that Japan may have gained an edge in competitiveness in a field where non-price factors, especially aftersales service, play a very prominent role in determining market shares.

The combined current-account deficit of the developed market-economy countries is expected to be around \$31 billion in 1981, which is a reduction of around \$19 billion compared with the level in 1980. Continuing high invisible earnings, favourable developments in the terms of trade of the area's main exports vis-a-vis primary commodities, and sluggish growth in import volumes due to slow growth in demand are among the major factors responsible for this improvement. However, the improvement may

operating procedures of the Federal Open Market Committee of the Federal Reserve System. The new operating procedures announced on 6 October 1979 were described as placing greater emphasis in day-to-day operations on the supply of bank reserves and less emphasis on confining short-term fluctuations in the federal-funds rate. Prior to this change in operating procedures, money-market interest rates were considered as target indicators for policy action concerning the money supply, and in the short run, efforts were made to confine the fluctuations of these interest rates to a rather narrow range. Available data show that the federal-funds rate has displayed greater day-to-day and week-toweek variability in the year since October 1979 as compared with the year before.

be confined mainly to the major countries, and the balance of the smaller countries taken together may not record any significant improvement in 1981. With further improvements in the terms of trade of manufactured exports and a better outlook for world import demand, the balance of payments of the OECD countries as a whole is expected to show a slightly lower deficit in 1982 than in 1981.

#### Chapter 4

#### TRENDS AND PROSPECTS IN THE SOCIALIST COUNTRIES

#### A. The socialist countries of Eastern Europe

The growth rates of net material product (NMP) of the socialist countries of Eastern Europe increased in 1980 compared with 1979 but fell short of planned rates, as may be seen from annex table A.16. Planned rates of growth in NMP for 1981 averaged 3.2 per cent reflecting more realistic targets in light of problems of structural adjustment.<sup>12</sup>

One of the major factors explaining the low rate of growth in 1980 was the disappointing performance in agriculture, due largely to poor weather, which affected many countries. The widespread slowdown in economic activity in 1979 and 1980 also reflected a planned reduction in the rate of investment during the five-year plan period that has just been completed.<sup>13</sup> Productivity growth also slowed down and this, together with a steadily declining rate of increase in the labour force, resulted in a decline in the rate of growth of industrial output.

No significant increases in the ratio of investment to NMP are provided for in the new five-year plans of the socialist countries of Eastern Europe for 1981-1985. However, major shifts in investment priorities are planned. For example, the proportion of investment in sectors with high capital output ratios such as energy is to be increased. In many countries the share of investment allocated to research-intensive, high-technology sectors and export-oriented industries will increase, while the share allocated to agriculture is to be maintained. Moreover, the slow rate of growth observed for the labour force is expected to continue. Although measures to improve the efficient use of resources are to be intensified, this is not expected to offset fully the negative impact on the growth of output of the factors mentioned above. Consequently, planned growth rates of NMP in the new five-year plans are lower than those of the preceding five-year plans.

As may be seen from annex table A.17, the value of the total exports of the socialist countries of Eastern Europe in both 1979 and 1980 increased by more than the value of imports in percentage terms, resulting in a trade surplus for those countries as a group in 1980, despite the worsening of Poland's trade deficit. A negative balance on invisibles, due mainly to interest payments on outstanding debt, almost exactly offset the trade surplus resulting in a small deficit on current account. As in the past, this deficit was financed by an increase in credits from developed market-economy countries. Total liabilities of the socialist countries of Eastern Europe to creditors in developed market-economy countries are estimated to have been about \$67 billion by the end of 1980.14 Of this amount, \$59.8 billion are estimated by the Bank for International Settlements (BIS) to have been borrowed from commercial banks.<sup>15</sup> Offsetting these liabilities are the gross deposits of the socialist countries of Eastern Europe with the banks of developed market-economy countries, which are estimated to have been \$15.6 billion at the end of 1980,<sup>16</sup> together with an undetermined amount of export credits. At the high interest rates currently prevailing, interest payments on net foreign-exchange liabilities may well increase to over \$7 billion in 1981.

The trade deficit of the socialist countries of Eastern Europe as a group vis-a-vis the developed market-economy countries was significantly reduced in 1980. Among other factors, this development reflected efforts to diversify exports, particularly with respect to manufactures, although these efforts have been hindered by restrictive trade measures in the developed market-economy countries.

The value of exports from the socialist countries of Eastern Europe to the developing countries in 1980 increased by less than imports from them in percentage terms, resulting in a reduction in the trade surplus of the socialist countries of Eastern Europe with these countries.<sup>17</sup> This development no doubt reflects primarily increases in the import bill for petroleum, natural gas and foodstuffs from developing countries. In trade between the socialist countries of Eastern Europe and developing countries imports and exports are expected to grow in value terms at lower rates in 1981 and 1982 than in the preceding two years, owing to more moderate price increases. In view of the large number of intergovernmental agreements between developing countries and socialist countries reached in 1980, the volume of this trade is expected to continue its rapid growth.

<sup>&</sup>lt;sup>12</sup>Actual growth rates of NMP in 1981 might, however, be considerably lower than planned mainly because of the sharp decline of output in Poland during the first half of 1981. Should that country experience an economic recovery in 1982, the rate of growth of NMP for the region as a whole could very well exceed 4 per cent, which is approximately the average rate of growth specified by the current five-year plans.

<sup>&</sup>lt;sup>13</sup>The reasons for this development are discussed more fully in part II, chapter 5.

<sup>&</sup>lt;sup>14</sup>Economic Survey of Europe in 1980, United Nations publication, Sales No. E.81.II.E.1., p. 182.

<sup>&</sup>lt;sup>15</sup>Bank for International Settlements, Fifty-first Annual Report (Basle, June 1981), p. 108.

<sup>&</sup>lt;sup>16</sup>Ibid.

<sup>&</sup>lt;sup>17</sup>For more details, see the report by the UNCTAD secretariat, "Review of trends and policies in trade between countries having different economic and social systems", (TD/B/859).

The rate of growth of exports is expected to exceed that of imports in value terms, resulting in an increase in the surplus of the socialist countries of Eastern Europe with developing countries, which is expected to be matched by increases in trade credits.

#### **B.** China

Since 1979, China has been engaged in a major effort of economic reform. Not only have investment priorities been changed, but also institutional arrangements for implementing economic policy decisions are undergoing a major transformation.

The rate of growth of net material product (NMP) was 5 per cent in 1980, compared with 7 per cent in 1979. This reduction was due almost entirely to the impact of severe drought which, among other things, led to a reduction in grain output of more than 12 per cent in 1980.

The reordering of investment priorities has led to a reduction in the rate of growth of capital construction projects and heavy industry in order to increase output in the agricultural sector and the production of consumer goods. Implementation of this policy resulted in an acceleration of the growth of output of light industry in 1980, accompanied by a decline in the rate of growth of output of heavy industry.

One of the unintended consequences of the reforms was a faster increase of investment than originally planned. Furthermore, changes in relative

prices and wage increases resulted in an increase in the budgetary deficit of the Central Government and a moderate increase in the rate of inflation. Indeed, the retail price index rose by about 6 per cent in 1980. One important component of this index retail prices for foodstuffs - rose at the considerably more rapid rate of 10.5 per cent. Among the measures taken to reduce inflationary pressures were reductions in planned central government expenditures for 1981, which particularly affected capital construction. In addition, output targets for steel, oil, and coal were lowered. Strong growth of agricultural output is expected as a result not only of the recovery from severe drought, but also of increases in the relative prices of agricultural products and improved incentives for producers. This will offset somewhat the reduced rate of growth planned for industrial output, and total NMP growth in 1981 may thus be in the range of 4-5 per cent.

The rate of growth of the value of exports accelerated in 1980, while the growth rate of that of imports declined, resulting in a reduction in the trade deficit from \$2.0 billion in 1979 to \$1.2 billion in 1980. The rapid expansion of exports in 1980 reflected particularly large increases in total exports of heavy industrial products, a category which includes oil, coal and heavy machinery. While China enjoyed a trade surplus with developing countries, the large deficit that has persisted in its trade with developed market-economy countries has made increasing its exports to those countries a principal policy objective.

#### Part II

## WORLD DEVELOPMENT IN HISTORICAL PERSPECTIVE

#### Chapter 1

#### NATIONAL DEVELOPMENT AND THE EXTERNAL ENVIRONMENT

Awareness that the disarray of the world economy may be due to deep-rooted structural problems has been accompanied by renewed interest in theories of development and economic crisis. Unfortunately, the causes of growth are still not well understood, nor are the forces that shape a process of downward spiral. In the absence of a generally accepted theory of growth and stagnation, a historical view of global development can only provide a useful insight into "how we got here". The discussion which follows focuses on a special aspect of the broader issue, namely, the interaction between national development and the external environment.

It is perhaps axiomatic to state that national development is, in the final analysis, determined by the internal dynamics of a country. But it is also true that the national development process itself is profoundly influenced by external economic conditions which, in turn, reflect the interaction of national development processes. This does not mean that a favourable external environment is a sufficient condition for growth, nor does it mean that development cannot take place under adverse external conditions. What is generally meant is that the internal cost of development will be significantly reduced if a favourable external environment prevails.

While widely used in development literature, the term "favourable external environment" has been somewhat loosely defined and has certainly undergone subtle changes of nuance with the passage of time. Moreover, countries have tended to view this concept in terms of their own experience which has, of course, varied widely. However, because of its key role in the understanding of international discussion of the development problem, it is worthwhile to examine the concept of external environment more closely.

Developed market-economy countries have always been conscious of the fact that their own national development and policies largely determine world economic conditions. Indeed, in their case, the distinction between internal and external factors is somewhat blurred. It is not surprising, therefore, that these countries have shown little interest in the concept of the external environment as a parameter of national development. Instead, they have stressed the need to preserve the post-war system of international economic relations which, in their view, produces favourable conditions for national development. The system as it was enshrined in the Bretton Woods agreements and in the GATT was of a liberal nature based on the principles of open and non-discriminatory trade; currency convertibility with a *de facto* dollar standard and fixed, but adjustable exchange rates; the international provision of credit facilities for payments adjustment; and the encouragement of private capital inflows while permitting measures to prevent disruptive capital movements.

The post-war system was remarkably successful in supporting the attainment of high levels of employment in the developed market-economy countries and the expansion of world trade and production. However, it could not reverse the disequilibrating forces which were gaining momentum throughout the period and culminated in the crisis of the early 1970s. Under the pressure of these forces, the post-war system has been replaced, in effect, by a series of multilateral arrangements or agreements, which, while reflecting the liberal objectives of the earlier period, accord a prominent role to negotiations as a means of resolving concrete problems. This is in sharp contrast to the pattern prevailing in the earlier post-war period when the management of the international economic system was limited to ensuring that the "rules of the game" were observed.

The present management of the international economy through multilateral negotiations, often at the highest political level, has altered perceptions in developed market-economy countries of the interplay between national development and the external environment. The latter is no longer seen as the reflection of a system moving along an equilibrium path, but rather as the outcome of negotiations. This has had two important implications. In the first instance, national policies are viewed internationally in terms not so much of their consistency with the rules of the game of a well-functioning system as of their possible impact on other national economies. Secondly, the management of the system requires the participation of all countries or groups of countries whose domestic policies can influence the world economy. Since developing countries, as a group, can affect strategic sectors of the world economy, it follows that their participation in the management of the system is required. As a result, developed market-economy countries are becoming increasingly aware that the management of the world
economy and the issues normally reserved for the North-South dialogue have become intermingled.

For the socialist countries the concept of external environment remains unambiguous. These countries have always considered that the liberal system centred around the Bretton Woods institutions and the GATT cannot be easily reconciled with the cen-trally-planned character of their economies. As a result, they have tended to take the external environment as given and to concentrate on establishing ad hoc economic relations with other groups of countries while ensuring that their domestic economies are insulated from the adverse effects of the external environment as far as possible. A mechanism which, inter alia, has served this objective well has been the harmonization of national plans within the frame-work of the Council for Mutual Economic Assistance (CMEA) and the specialization of national production along lines agreed upon among the member States. Nevertheless, the economies of the socialist countries did not remain immune to the adverse effects of the disequilibrating forces that prevailed in the international economy in the 1970s. Conversely, their transactions with the rest of the world in the areas of finance and trade, especially trade in foodstuffs, have been of a nature and size that can have an impact upon the shaping of international economic conditions.

The case of the developing countries was quite different in this regard. Unlike the socialist countries, their economies were critically dependent upon the economic conditions prevailing in the colonial centres. While their degree of economic dependence was progressively lessened, the external environment continued to exert an overwhelming influence in determining the internal dynamics of development in most developing countries. It is not surprising, therefore, that these countries saw in the external environment both the causes of their underdevelopment as well as a mechanism for breaking their traditional economic ties. For this to happen, the external environment had to become favourable through a series of international measures. While views differ as to what might constitute a favourable external environment, developing countries themselves have shown a remarkable consistency in their views on the subject in international discussions and negotiations. Broadly speaking, a favourable international environment came to be identified by them with the following:

- (a) A vigorous and sustained increase in demand for exports of primary goods, stemming from high levels of economic activity in the developed countries;
- (b) Improved or at least stable terms of trade between primary commodities mainly exported by developing countries and manufactured goods imported by them;
- (c) Reduced instability in export earnings and the availability of adequate balance-of-payments financing to offset shortfalls in the purchasing power of their exports;
- (d) Improved access to markets, possibly on a preferential basis. This has been stressed in the case of access to world markets for developing

countries' exports of semi-manufactures and manufactures; acquisition of technology; and provision of finance;

(e) Net transfers of long-term capital to developing countries on a level commensurate with their trade gap. The gap was expected to increase relatively quickly as a result of a pace of development that was envisaged to be significantly higher than the rate obtainable if international market forces were to be allowed to determine the rate of growth. Of importance in this context was the requirement for the provision of official development assistance (ODA). In fact, the ODA target of 0.7 per cent of GNP was seen as a fiscal instrument in the hands of the international community to ensure that development goals would be attained even when markets turned unfavourable.

The ability of the OECD countries to obtain full employment on a sustained basis was not questioned. Consequently, emphasis was placed on the other requirements for a favourable external environment. The measures proposed in this respect have been of a reformist character. Commodity agreements, the generalized system of preferences, codes of conduct and the like (liner conferences, transfer of technology, restrictive business practices), compensatory balance-of-payments financing and the ODA target do not challenge the foundations of the international economic system centred on the Bretton Woods agreements and the GATT. In fact, it may be argued that such measures serve to strengthen the functioning of the present system.

As in the case of the OECD countries and the socialist countries, the developing countries saw the relationship between the external environment and national development in a different light in the 1970s. In the first instance, the slow progress of the negotiations concerning measures in favour of developing countries within the framework of the prevailing system gave rise to widespread disillusionment concerning the prospects for a reformist strategy. Moreover, and perhaps more fundamentally, the view gained ground that the external environment, even when favourable conditions prevailed, was by no means neutral to the kind of domestic development that it rendered feasible. Particular concern was expressed about the tendency of the international system to distribute world income in a manner that further accentuated the existing inequalities among nations and, within each developing nation, among different population groups. Associated with this view was the belief that the international system has served to preserve the traditional patterns of control over resources and thus it has perpetuated the dependence of developing countries upon decisions by the metropolitan centres. The success of the OPEC member countries in gaining effective sovereignty over their natural resources and in wresting control of the oil markets from the transnational corporations has underlined the significance of this point.

But the turning point in the change of perceptions was reached when it became widely realized that full employment in the OECD economies could not be taken for granted, and that the prospects for the foreseeable future were indeed bleak. This removed the lynchpin of the reformist rationale. If the system could not provide for growth rates it was certainly less attractive. Moreover, low growth rates tend to increase instability in output and prices which, in turn, encourage national policies that are inconsistent with the established multilateral arrangements. In the field of trade and money, the developing countries consequently came to recognize that the external environment could no longer be treated as a parameter with a predictable value; they now

see it as the reflection of negotiations whose outcome they can influence. The element that differentiates between the reformist package outlined earlier and the Programme of Action on the establishment of a New International Economic Order adopted by the General Assembly in its resolution 3202(S-VI) of 1 May 1974 is the explicit recognition by the latter of the need to change the structure of the external environment. Fundamental to this approach is the stress on the need to change the decision-making process which affects production and price levels and the international distribution of income.

### Chapter 2

#### **DEVELOPED MARKET-ECONOMY COUNTRIES**

TABLE 4 World trade and industrial production

of selected industrial countries, 1820-1980

(Average annual percentage rates of growth)

Part I of this Report indicated that the stagflation prevailing during the 1970s was expected to continue, at least in the immediate future. The resilience of stagflation has baffled policy-makers and economists, who have grown accustomed to viewing economic developments in the light of the experience of the 1950s and 1960s. Indeed, as a result of these prosperous decades, the belief has become ingrained that a growth path with low inflation, high employment and vigorous productivity advances can be expected in the normal course of events, provided that governments follow appropriate demand management policies and adhere to the rules of the game underpinning the international economic system. It was natural, therefore, that the first reaction to the explosive developments of the early 1970s was to attribute the causes to "an unusual bunching of unfortunate disturbances unlikely to be repeated on the same scale, the impact of which was compounded by some avoidable errors in economic policy".18

Today, an increasing number of observers tend to think that the current situation cannot be properly understood in the framework of cyclical analysis. As a result, the emphasis in research is shifting to the longer-term aspects of development and structural change. At the policy level, this trend is reflected in increasing scepticism about the adequacy of macroeconomic policies – whether fiscal or monetary – and in a renewed emphasis on measures dealing with specific sectoral problems. The sections which follow attempt to make a contribution to this discussion by examining certain aspects of the structural change that has taken place in the developed marketeconomy countries during the post-war era.

#### A. Long waves in economic development

Seen in historical perspective, the economic development of developed market economy countries and, consequently, of the world economy has been anything but smooth. The estimates provided in table 4 indicate that industrial production and trade experienced long periods of acceleration, followed by long periods of deceleration. Thus, the rapid expansion during the period 1840–1870 gave way to the "long depression" of 1873–1896. The strong and sustained upswing from the middle of the last decade of the nineteenth century to 1913 was interrupted by the First World War and followed by slow economic growth from 1920 to 1938. The post–Second World War period until the early 1970s witnessed an

Period         (rolume)           820-1840          2.7           840-1870          5.5           870-1890          2.2           890-1913          3.7           913-1938          0.4	World	Industrial production							
Period	trade (volume)            2.7            5.5            2.2            3.7            0.4            7.3	UK a	Ger- many <sup>a</sup>	France <sup>a</sup>	USA				
1820-1840	2.7	3.2							
1840-1870	5.5	4.6	4.5		5.4				
1870-1890	2.2	1.2	2.5		4.9				
1890-1913	3.7	2.2	4.2	3.96	5.9				
1913-1938	0.4	2.0	2.2	0.9	2.0				
1938-1948	_	2.2	- 5.8	0.8	7.4				
1948-1971	7.3	3.1	8.4	6.0	4.0				
1971-1980	5.8 °	1.0	2.0	2.4	3.0				

Source: UNCTAD secretariat calculations, based on various sources.

<sup>a</sup> In boundaries of the period considered. Data for Germany since 1948 refer to the Federal Republic of Germany only.

<sup>b</sup> 1901-1913.

e Excluding the trade of socialist countries.

unprecedented expansion in industrial output and trade but this was followed by the "long recession" of the 1970s.

The possible existence of long-term cycles has been the subject of extensive research and inconclusive debate, but whether recurring long-run cycles exist or not is not an essential issue for the purposes of this analysis. What is important is to understand the mechanism that forces the international economy to move along a non-linear path of growth. From this point of view, a historical perspective does provide some useful insights in so far as the long waves which are discernible exhibit certain common features. Some of them appear to be of relevance to the theme of this report and are briefly reviewed below.

The most striking common feature is that the periods of upswing are invariably associated with the introduction and diffusion of new technologies. Economic history is quite unambiguous about this; the application of new technologies has been at the root of development. Industrial complexes embodying such technologies unfolded in sequence and gave a powerful boost to the economies; phases of the upswing are identified with the emergence of leading sectors: manufactured textiles, the steam engine, steel, railroads, electricity, the chemical industry, the automobile, electrical appliances and electronics, and now perhaps the microprocessors.

At a given time, the structure of an economy consists of a complex of industries of different technological vintage. The historical analysis shows that the periods of slow growth were characterized by a dis-

<sup>&</sup>lt;sup>18</sup>See OECD: Towards full employment and price stability, report to the OECD by a group of independent experts (McCracken report), Paris, 1977. p. 14.

tinct deceleration in the rate of expansion of the old leading industrial complexes, while the impact on the economy of the emerging new industries – embodying new technologies and moving ahead at high rates – was not yet measurable.

Another feature that emerges from the historical analysis is that the phases of upswing and downswing are usually characterized by shifting balances between manufacturing on the one hand, and foodstuffs and raw material supplies and prices on the other. Thus, periods of rapid expansion of income tend to be associated with an adequate supply of foodstuffs and raw materials, the terms of trade tend to be more favourable to manufacturing, and real urban income increases in relative terms. Conversely, during periods of slow growth, prices of foodstuffs and raw materials tend to climb, income distribution swings against urban labour while profits in both industry and agriculture tend to rise.

To be sure, the timing of the interaction of these forces varied from case to case. Conditions particular to each period affected regularity in the interplay of forces. In certain instances, commodity prices started rising well before industrial production showed signs of deceleration. Thus, the relative shortage of foodstuffs and raw materials was reflected in significant price rises in the 1850s, 1890s and 1930s. Another uncertainty relates to the possible duration of the price upswing. In this regard, history cannot provide a useful insight because all periods of price upswings and slow growth were interrupted by wars.

The interaction between manufacturing and the primary sectors was not limited to changes in relative prices and the direction of investment, but also extended to the labour market. Periods of abundance of commodities and vigorous industrial expansion witnessed migratory waves to urban centres which eased the pressure on real wages. But the converse was not observed: during periods when commodities were scarce and industrial expansion slackened, labour did not move back to the countryside. In the event, the scarcities were relieved by bringing new agricultural land into the system and by improving the yield of agricultural land in the metropolitan areas.

The management of the economy was naturally easier during the periods of upswing. The fundamental choices regarding technology and investment had been made earlier or could be made with the minimum of risk, and the requirements of management were to help to keep the economy on its growth trajectory. During periods of slow expansion and adjustment, management proved to be much more difficult. The structural shifts from old to new leading industrial complexes and the associated changes in the distribution of investment among the various sectors required a decisive shift from demand management to policies dealing with the promotion of structural adjustment and change. In general, governments were slow to discern the changing conditions and showed remarkable resistance to taking supply-oriented measures. And, as was noted earlier, protracted periods of disequilibria led to war.

#### **B.** The post-war prosperity

The crisis of the 1970s has led to a re-examination of the factors that contributed to the remarkable growth and unprecedented prosperity prevailing during the period 1945-1971. Rather than seeing the post-war prosperity as the warranted outcome of the working of the international system, there is now a tendency to view this period as the upswing phase in the secular trend. Indeed, it exhibits certain features that also characterized earlier long-term periods of upswing. For example, the post-war period was noted for its technological thrust and the diffusion of new technologies on a world-wide scale; favourable supply-demand conditions in foodstuffs and raw materials (including energy), and labour markets that made it possible for industry to grow rapidly without undue inflationary pressures. On the other hand, the post-war period was characterized by the dominant role of certain factors that are unlikely to reoccur. What follows is a brief discussion of the salient features of the structural change and transformation of the economies of developed marketeconomy countries in the post-war period.

The most fundamental characteristic of the period 1945–1971 was the unequal distribution of economic forces in terms of production, technology and productivity levels among the OECD countries. On the one hand, the United States economy emerged in 1945 as the preponderant economic power. On the other hand, Western Europe and Japan faced the gigantic task of reconstructing their economies ravaged by the war and modernizing their industrial structures. The huge backlog of investment opportunities and the easy access to new technologies and production techniques was a happy confluence that provided the basic and fundamental precondition for growth. As may be seen from table 5, the differences in the productivity levels in 1950 between the

#### TABLE 5

Selected indicators of development and structural change of developed market-economy countries: 1950-1970

		Annual average compound growth rate							
	Index of relative	_		Produ	ictivity	Gross			
	productivity levels 1950 USA = 100	GDP	Labour force	Manu- factur- ing <sup>a</sup>	Agricul- ture <sup>b</sup>	fixed capital forma- tion ¢			
USA	100	3.5	1.5	2.8	5.1	4.1			
Sweden	56	4.0	0.7	6.2	4.7	7.1			
UK	52	2.7	0.5	3.5	3.9	6.7			
Netherlands	45	4.8	1.3	6.4	4.2	8.0			
France	42	5.1	0.4	6.1	5.3	7.4			
Germany, Fed.									
Rep. of	39	6.2	1.2	6.8	5.6	8.0			
Austria	27	4.9		5.2	6.2	9.2			
Italy	22	5.6	0.7	7.1	5.9	7.0			
Japan	8	9.4	1.8	9.8	6.1	14.7			

Source: UNCTAD secretariat calculations, based on various sources.

<sup>8</sup> Output per man hour in USA, France, Sweden, Federal Republic of Germany; output per employed person in all others. Growth rates cover the period 1959-1970 for France, 1958-1970 for UK and Italy, 1956-1970 for all others.

<sup>b</sup> Value-added per person employed in agriculture (1950-1970).

<sup>c</sup> Excluding residential construction except for Federal Republic of Germany, Austria and Japan; growth rates cover the period 1953-1970, except for France (1958-1970).

United States, on the one hand, and Western Europe and Japan, on the other, were substantial. Indeed, for many of those countries the gap in productivity levels was no more favourable than that now facing many developing countries. To a large extent, the growth in the post-war period may be understood as a process of "catching up". With the exception of the United Kingdom, all the OECD countries grew at significantly higher rates than the United States' and by the end of the 1960s, they had made remarkable progress towards closing the productivity gap.

As expected, the high growth of GDP reflected high rates of investment in plant and equipment. Here again the difference between the United States' experience and that of the other countries was striking. In the case of the United States, gross fixed capital formation increased rather slowly, and for good reasons. At the beginning of the post-war period, American households were already well equipped with durable consumer goods, which came to play a dominant role in the industrial expansion of the other countries.<sup>19</sup> Thus the growth of fixed investment was determined basically by the growth potential of "established" markets and by investment opportunities arising from the application of new technologies and products.20 This largely explains why the growth of productivity in the United States' manufacturing sector was lower than in other OECD countries.

While the advancing frontiers of technology may have determined the outside limit of United States growth, other OECD countries had the opportunity to grow much faster. In the early post-war period, few households were equipped with consumer durables<sup>21</sup> and the national industries moved rapidly to fill their needs in such respects. As may be seen from table 6, the growth of the relevant sectors, especially the automobile industry, electric power, electronics and chemicals, far outstripped the average for manufacturing as a whole. Growth in these industries was effected through investment in modern technologies, based on large-scale production, which were already in use in the United States. This is reflected in the remarkable productivity gains experienced by most of these countries in the period 1950-1970.

While the factors mentioned above were certainly necessary for sustained growth, they were by no means sufficient. In this context, the international system of economic co-operation based on liberal principles of trade and currency convertibility and centred around the Bretton Woods institutions and the GATT is often credited for the sustained growth in the post-war period. While there is no doubt that the international economic system played a positive role, it is often forgotten that the transitional period of structural change in Western Europe and Japan (roughly 1945–1958) was supported by a series of *ad hoc* measures which in fact required the non-application of certain fundamental rules of the game of the international economic system. Basic to this was the willingness of the leading industrial power – the United States – to underpin the programme of reconstruction and expansion through a series of special measures which, while allowing discrimination against the United States itself, provided abundant technology, finance and markets for the other OECD countries. Thus, the regional economic integration of Western Europe was actively pursued and culminated in the establishment of the European Economic Community.

TABLE 6
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Indices of industrial production in selected sectors (1955 = 100)

	US	SA .	Wes Eur		J	apan
	1960	1970	1960	1970	1960	1970
Manufacturing of which:	112	181	132	231	23	852
Motor cars Television	99	121	195	409	825	15895
receivers	78	108	278	569	261	10060
Electric power	134	261	111	210	177	552
Chemicals Durable con-	134	286	150	375	216	842
sumer goods Textiles and	111	167	132	228	203	583
clothing	108	137	120	155	152	268

Sources. United Nations, Statistical Yearbook; United Nations, Yearbook of Industrial Statistics; OECD, Industrial Production 1955-1971 (Paris, 1973).

In retrospect, this act of collective self-reliance on the part of Western Europe made it possible for industrial production to expand at rates that could not have been secured without a protected regional market. The expansion of production and trade would not have been possible, however, without the special transitional measures that were adopted in the area of money and finance. Bypassing the Bretton Woods institutions, the European Recovery Programme (ERP) provided sufficient resources to finance the import surpluses that inevitably occurred during the reconstruction period. Thus, between late 1948 and the end of 1951, \$11.5 billion had been disbursed, of which 90 per cent was in the form of grants. Moreover, the European Payments Union (EPU), which lasted until 1959 and which in effect allowed for discrimination against imports from the United States, enabled the Western European countries to manage their payments imbalances in a manner that did not inhibit their development plans.

Another important factor that contributed to the sustained economic growth in the post-war period relates to the favourable conditions prevailing in the labour markets. In most cases the expansion of the labour force was adequate to sustain high levels of economic activity. In some, such as Japan and the Netherlands, the large increases in the industrial

<sup>&</sup>lt;sup>19</sup>For example, by the mid-1950s, 75 per cent of American households owned automobiles, 81 per cent television sets and 96 per cent refrigerators.

<sup>&</sup>lt;sup>20</sup>For example, air conditioners, aerospace outlays and computers.

<sup>&</sup>lt;sup>21</sup>In 1954, in France and the United Kingdom, for example, the proportion of households with refrigerators was about 7 per cent.

labour force were supported by a high natural rate of population growth. In others, labour shortage was eased through the massive migration from other countries and notably from Southern Europe (for example to the Federal Republic of Germany and France). In all cases, the expansion of the industrial labour force was facilitated by the continuous migration of population from agricultural areas to urban centres. The favourable labour market conditions also helped to create a relatively mild climate in labour-management relations, which in turn contributed to the conclusion of wage settlements that were not substantially out of line with national productivity gains.

These favourable conditions would not have yielded a sustained expansion if relative price stability could not have been ensured. A major contribution to price stability was made by the primary sector. Indeed, as may be seen from chart 6, cereals, agricultural raw materials and energy exhibited remarkably stable prices throughout the period 1945-1970. This price performance reflected the abundant supply of these products throughout most of the period in question. With regard to foodstuffs and agricultural raw materials, many countries succeeded in substantially increasing productivity and agricultural output. But the determining factor has been the existence of huge grain stocks in the United States resulting from policies of farm support. These stocks served as a buffer against the annual fluctuations of demand and domestic supplies in individual countries and consequently helped to maintain relatively stable and low prices.

Another market that operated under abundant supply conditions was that for energy. Recoveries of huge oil resources in the Middle East at low cost were reflected in low oil prices which made it possible for the manufacturing sector to expand without exerting pressure on energy supplies. As was noted earlier, the pattern of rapid industrial expansion in the OECD countries in the post-war period was profoundly influenced by the availability of abundant and cheap energy which gave an additional stimulus to the development of energy-intensive technologies.

Prices of other primary commodities and of metals, although fluctuating widely from year to





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year, did not on the whole follow an upward trend and consequently helped to dampen the pressure on the costs of industrial inputs.

One of the factors contributing to a relatively non-inflationary climate was the fixed exchangerate system established by the Bretton Woods system. In so far as countries relied upon the expansion of exports to sustain their growth, they had to avoid over-valuation of their currencies and consequently had to take domestic measures to contain inflationary pressure.

#### C. From prosperity to the period of adjustment in the 1970: some policy dilemmas

The chronology of events that led to the breakdown of the Bretton Woods system and the economic crisis of the early 1970s is well known and fully documented.<sup>22</sup> Suffice it here to mention a few of the major factors that shaped the new economic conditions of the 1970s.

The first and perhaps most important relates to the decisive shift in the balance of economic power among the OECD countries and the transition from the monopolar situation that existed among the developed market-economy countries immediately after the war to the multipolar conditions of today. The progress of many Western European countries and Japan in their efforts to close the gap between them and the United States has created new conditions of economic interdependence among the OECD economies. The possibilities of reconciling conflicting objectives through the growth process became more remote. Conflicts in the areas of trade and money increased. In Western Europe, there was also widespread concern about the tendency towards the internationalization of production and finance under the leadership of United States transnational corporations. All these problems and concerns indicated that the international economy had to be managed, if at all, on a collective basis.

Another set of factors which accounted for the changed environment related to conditions in key markets, and more particularly labour, foodstuffs and energy. With regard to the labour market, the close of the 1960s witnessed the end of the peaceful climate that had prevailed in industrial relations, and wages increased faster than national productivity. As far as market conditions were concerned, there were increasing signs of supply constraints, in particular in cereals. The international prices of foodstuffs were maintained at levels that encouraged many countries, including several major developing countries, to shift away from food production to other more profitable activities and to rely increasingly on imports of foodstuffs. At the same time, the United States stocks of grain and reserve crop land, which helped to maintain stable world

<sup>22</sup>See, inter alia, the report by the UNCTAD secretariat "Policy issues in the fields of trade, finance and money, and their relationship to structural changes at the global level" (TD/225), reproduced in *Proceedings of the United Nations Conference on Trade* and Development, Fifth Session, Vol.III – Basic Documents (United Nations publication, Sales No. E.79.II.D.16). prices for wheat, experienced a declining trend. Reserves declined from a level of 95 days equivalent of world consumption in 1961 to 37 in 1973.<sup>23</sup> The divergence between the trends of world supply and demand in respect of foodstuffs was accentuated in the late 1960s and early 1970s by poor harvests in the USSR and Asia, and led to a drastic depletion of reserves and ultimately to a sharp rise in prices.

As in the case of foodstuffs, internationally low prices for oil encouraged demand to run ahead of supply at the turn of the decade of the 1960s. The relationship between additions to "proved oil reserves" and demand is a rough indication of this. While additions to proved world reserves averaged about six times the level of world consumption during the period 1950-1970, this relationship was reversed towards the end of the 1960s and beginning of the 1970s. Again, as in the case of agricultural products, low prices for oil led to an increase in the share of petroleum consumption in total primary energy and encouraged countries to rely increasingly on imports. The sharp increase in oil prices in the early 1970s marked the end of the post-war period of cheap energy. The new market structure pointed to the need for structural adjustments in the economies of the OECD countries in order to take into account the new cost conditions and the need to conserve oil and develop alternative sources of energy.

While there has been considerable controversy concerning the nature of the changes outlined above, there is a general appreciation that the economies of the OECD countries will have to undergo a structural adjustment and equip themselves to deal more effectively with the new international economic environment.

Opinions are divided, however, as to the measures required to promote structural change. While increasing attention has been given to problems of restructuring at the sectoral level, the focus has been on macro-economic policies. In this context, the question of inflation has come to the fore as the highest priority for governments. As was pointed out earlier, however, the origins of the inflation lie in the structural forces that developments in the late 1960s and 1970s brought into sharp relief.<sup>24</sup> It follows, therefore, that the way out of the inflationary spiral is through the improvement of productivity, which in turn requires high levels of investment activity and changes in the sectoral allocation of resources.

On this there is no disagreement in principle but, in practice, measures to combat inflation have been seen almost exclusively in macro-economic terms. The medium-term strategy that the OECD countries adopted in the mid-1970s was predicated on the assumption that effective control of inflation was a

<sup>&</sup>lt;sup>23</sup>Including United States stocks and grain equivalent of crop land. See Brown, *In the Human Interest* (New York, 1974), p. 56.

<sup>&</sup>lt;sup>24</sup>See UNCTAD "Report of the Group of High-Level Governmental Experts on the effects of the world inflationary phenomenon on the development process", *Official Records of the Trade and Development Board, Eighteenth Session, Annexes*, Agenda item 5(c), document TD/B/704.

prerequisite to the attainment of higher levels of economic activity.<sup>25</sup> Thus, on the whole, fiscal and monetary policies in the 1970s were on the cautious side. The persistence of stagflation in spite of cautious demand management gave rise to doubts concerning the efficacy of activist macro-economic policies in general and fiscal policies in particular.

Paradoxically, this was not followed by recognition of the need to undertake specific micro-policies in planning structural change at the sectoral level. Instead, there was a definite shift towards placing more emphasis on monetary instruments. The restrictive monetary stance taken in recent years is clearly reflected in the fact that the rates of monetary expansion slowed down in almost all OECD countries during the period 1975-1980.<sup>26</sup> Yet these policies have not yet resulted in a relaxation of the inflationary pressures; instead, they have been accompanied by increases in unemployment. Furthermore, and perhaps more importantly for the requirements of structural change, high interest rates associated with tight monetary policies appear to have led to a decisive shift in the composition of loanable funds in favour of short-term high-yielding instruments, an outcome which cannot but adversely affect the level of real investment.

<sup>&</sup>lt;sup>23</sup>See the OECD Communique on the meeting of the Council at Ministerial level in June 1976. (Activities of OECD in 1976. Report by the Secretary-General, Paris 1977, Annex I.)

<sup>&</sup>lt;sup>26</sup>See Bank for International Settlements, Fifty-first Annual Report (Basle, 1981), pp.54-55.

## Chapter 3

#### **DEVELOPING COUNTRIES**

At the end of the Second World War, many of the developing countries were still governed by colonial powers. While the process of decolonization was largely completed in the 1960s, economic structures and trading patterns established during the era of colonial domination still persist. Nevertheless, the post-war period witnessed substantial progress and important structural changes in developing countries which are bound to have far-reaching implications not only for their economies but also for the world economic system as well.

The first section of this chapter examines a number of quantitative indicators which illustrate the structural transformation of the economies of developing countries and the efforts made by them to mobilize resources for development. This review, however, is not intended to provide an assessment of the development process in developing countries in the post-war period.

The second section of this chapter examines the impact of the external environment on the balanceof-payments of developing countries and focuses on the adjustment process in these countries during the decade of the 1970s.

The third section of this chapter reviews trends concerning economic co-operation among developing countries and the measures taken by these countries to strengthen such co-operation in the framework of collective self-reliance and thus reduce their asymmetrical dependence upon economic conditions prevailing in the rest of the world.

#### A. Selected aspects of post-war development: an overview

Developing countries have achieved impressive gains in a number of areas during the post-war era and they are now emerging as a major economic force (see tables 7 and 8). In the last two decades, their combined gross domestic product grew at an annual average rate of 5.6 per cent. During the same period, value added in industry<sup>27</sup> and exports registered annual increases in real terms of 7.3 per cent and 4.8 per cent, respectively. In comparative terms, the developing countries' participation in world economic activity (see table 7) has increased, to reach a significant level. For example, the latest data for the developing countries show that they account for 18 per cent of both world GDP and of value added in world industries (excluding the socialist countries of Eastern Europe and Asia) and for 28 per cent of world exports.

#### TABLE 7

#### Developing countries: selected indicators of comparative performance since 1960

	Percen world	tages of totals <sup>a</sup>	Average annual volume growth rates (in percentages)
Indicators	1960	1980 b	<i>1960-19</i> 80 ь
ECONOMIC INDICATORS <sup>c</sup>			
Gross domestic product Value added	17.0	18.3	5.6
Industry	11.9	18.1	7.3
Manufacturing	10.1	12.9	7.3
Exports	21.5	28.1	4.8
DEMOGRAPHIC INDICATOR	S S		
Population	42.9	48.7	2.6
Urban population	40.2	51.9	4.4
Labour force	65.7	69.2	2.1
In industry	35.4	45.5	3.9

Source: UNCTAD secretariat calculations, based on various international sources. <sup>a</sup> World totals exclude the socialist countries of Eastern Europe and Asia except for exports and total population. Hence, the distribution of urban population is not comparable to that of total population.

<sup>b</sup> Or the latest year for which data are available.

<sup>c</sup> Shares relate to current values.

Demographic statistics indicate that the urban population in developing countries now outnumbers its counterpart in the developed market economy countries. The industrial labour force of developing countries has expanded rapidly and is approaching in absolute numbers that of the North.

The economic progress achieved largely reflects the efforts undertaken by developing countries in the areas of investment, savings, health, nutrition and education. Indeed, within a period of two decades the proportion of gross domestic investment to GDP has increased from 18 per cent to 27 per cent. The gross domestic savings ratio has followed a similar trend.<sup>28</sup>

Major improvements have also been registered in the areas of health and nutrition. Better medical care and control of communicable diseases have resulted in significant reductions in crude death rates and in infant and child mortality rates. They have also con-

<sup>&</sup>lt;sup>27</sup>Mining, manufacturing, public utilities and construction.

<sup>&</sup>lt;sup>28</sup>For developing countries, excluding four surplus countries, the ratio of gross domestic investment to GDP increased from 17.7 per cent in 1960 to 26.4 per cent in 1978. The gross domestic savings ratio grew at a slower rate, from 16.4 per cent in 1960 to 23.3 per cent in 1978.

#### TABLE 8

Developing countries: selected social and economic indicators

Indicators	1960	1970	1 <b>9</b> 78 ¤
SAVINGS 'AND INVESTMENT Gross domestic investment (percentage of GDP)			
All developing	17.7	19.9	26.6
Excluding 4 surplus countries <sup>b</sup> Gross domestic savings (percentage of GDP)	17.7	20.1	26.4
All developing	17.1	19.7	26.0
Excluding 4 surplus countries b	16.4	18.7	23.3
INCOME DISTRIBUTION Percentage of income received by lowest 20 per cent of			
households	4.5	4.9	4.1
households	24.6	24.7	19.4
URBANIZATION AND EMPLOYMENT Urban population (percentage of			
total)	21.2	26.4	29.3
population)	39.4	37.2	36.1
(percentage of labour force)	11.0	13.2	15.3
HEALTH AND NUTRITION Life expectancy at birth (years) Infant mortality rate (per	46.9	51.3	54.0
thousand live births) Population per physician	76.3	55.3	47.9
(thousands)	8.0	6.6	4.6
EDUCATION Primary school enrolment ratio			
(per cent)	55.6	69.5	78.1
(per cent)	8.4	17.2	22.8
Adult literacy rate (per cent)	35.1	45.6	52.3

Source: World Bank, World Tables 1980 and United Nations, Handbook of World Development Statistics, 1980. (PPS/QIR/5/1980.)

Note: For social indicators, the developing country classification used is that of the World Bank which excludes capital surplus oil-exporting countries and includes developing countries in Europe.

<sup>a</sup> Or the latest year for which data are available.

<sup>b</sup> The four surplus countries are Iraq, Kuwait, Libyan Arab Jamahiriya and Saudi Arabia.

tributed to the increase in the life expectancy at birth of the population from 47 years in 1960 to 54 years in the 1970s.

The developing countries have made remarkable progress in education, which is vital for building up technological capacity. Primary school enrolment ratios increased sharply from about 56 per cent in 1960 to 78 per cent in the late 1970s. The increase was more pronounced at the secondary level, at which a tripling of the ratio was registered over the same period. The spread of education has resulted in a higher adult literacy rate of 52 per cent according to the most recent estimate, as against 35 per cent in 1960.

While impressive progress has been made, many urgent problems remain. Rapid population growth continues to exert pressure on economic resources. In particular, the pace of urbanization has been very rapid and has exercised a strong pressure on public finance in the form of sharply increased public services and investment in urban infrastructure. How-, ever, urbanization has not been accompanied by a parallel increase in employment. Unemployment and underutilization of skills are prevalent in developing countries and the absence of suitable employment opportunities has encouraged the emigration of highly-skilled professionals.

Another major problem relates to the distribution of income. Experience has shown that a growth process that is not associated with an improvement in the distribution of income may not be self-sustaining in the long run. As shown in table 8, the gains of development have not been shared equi-tably. The percentages of income received by the poorest 20 per cent of households in developing countries and by the richest 5 per cent give an indication of the skewness of income distribution. The poorest 20 per cent received only 4.5 per cent of total income in 1960. This share did not improve to any significant extent in the 1960s and recent estimates indicate that by the end of the 1970s it may even be lower than in 1960. On the other hand the richest 5 per cent of households received more than 19 per cent of total income, a significant decline from the 1960 level but nevertheless high by international standards.29

#### 1. Growth performance

Between 1950 and 1980, GDP of developing countries increased at an annual rate of 5.4 per cent, which represents a remarkable performance by comparison with the pre-war period. Growth rates have varied over time. Thus, during the 1950s, the average rate was 4.8 per cent, while in the 1960s, the pace accelerated to 5.7 per cent, surpassing by a wide margin the 5 per cent target set for the First United Nations Development Decade. The unfavourable economic climate in the 1970s had an adverse impact on the development efforts of many developing countries. GDP rate averaged 5.6 per cent a year, falling short of the 6 per cent target set in the International Strategy for the Second United Nations Development Decade.

When population growth is taken into account, however, the gains registered are less satisfactory. Indeed, GDP *per capita* increased at annual rates of only 2.5 per cent in the 1950s, 3.1 per cent in the 1960s and 3.0 per cent in the 1970s. These rates have not been sufficient to close the gap in the standard of living between developed and developing countries. In 1978, GDP per capita in developed countries including the socialist countries of Eastern Europe was about nine times that of developing countries.

The overall averages, however, conceal wide disparities among developing countries. At one extreme, several countries concentrating on exports of manufactures achieved an impressive growth rate of 6.4 per cent a year in the 1960s and in the 1970s

<sup>&</sup>lt;sup>29</sup>The 1970 figure for developed market-economy countries is 14 per cent.

attained a record growth of 7.1 per cent. It should be noted, however, that these countries – concentrated mainly in South-East Asia and Latin America – are few in number and represent only 13 per cent of the total population of developing countries, although they account for over one-third of the GDP of all developing countries. While their economies differ in scale and resource endowments, they are all characterized by an outward-looking trade policy favouring export promotion, high quality of the labour force, entrepreneurship and a capacity to respond flexibly to adverse world conditions.

At the other extreme, the least developed countries were unable to expand production at satisfactory rates. They have also been less well equipped to absorb external shocks and to adjust their economies to changing world conditions. Their real income *per capita* did not increase in the 1960s and actually declined in the 1970s (see last line of table 9).

#### TABLE 9

## Growth rates of total and per capita GDP and real income of developing countries

(Per cent per annum)

	1960-1970	1970-1980
GDP		
Total developing countries	5.7	5.6
Fast-growing exporters of manufactures	6.4	7.1
Least developed countries	2.6	3.2
PER CAPITA GDP		1
Total developing countries	3.1	3.0
Fast-growing exporters of manufactures	3.6	4.5
Least developed countries	0.0	0.6
REAL INCOME		
Total developing countries	5.0	7.1
Major oil-exporting countries	3.6	14.0
Fast-growing exporters of manufactures	6.3	6.6
Last developed countries	2.6	2.3
PER CAPITA REAL INCOME		
Total developing countries	2.4	4.5
Major oil-exporting countries	0.9	11.1
Fast-growing exporters of manufactures	3.5	4.0
Least developed countries	0.0	-0.3

Source: UNCTAD secretariat estimates, based on international sources.

Note: The GDP series is based on annual chain-weighting of production by sector. Real income is gross domestic product adjusted for the terms of trade effect. In this table and in subsequent tables in this section (A), unless otherwise specified, the country classification used is that of the UNCTAD Handbook of International Trade and Development Statistics: Supplement 1980.

Of a sample of 103 developing countries for which data are available, one-third, most of them least developed countries, which accounted for more than 9 per cent of the population of developing countries in 1978, registered zero or negative growth of GDP *per capita* during the period 1970–1978. At the other end are the countries that were able to meet the annual *per capita* growth target of 3.5 per cent for the Second United Nations Development Decade. They accounted for nearly one-third of the countries in the sample as well as one-third of the population of developing countries. The worsening in the situation of many developing countries in the 1970s is reflected in the frequency distribution of GDP *per*  capita growth rates in the 1960s and 1970s (see chart 7). In the 1970s, about one-half of the countries recorded *per capita* growth of less than 2 per cent whereas the corresponding proportion in the 1960s was one-third. It should also be noted that only 12 countries registered a decline in GDP *per capita* in the 1960s and that about 60 per cent of the countries surpassed the *per capita* growth target set for the First United Nations Development Decade.

#### 2. Production structure and technology

Agriculture continues to be the principal economic activity in developing countries, accounting for 60 per cent of the labour force in 1978. However, as a source of income, the importance of agriculture has markedly declined. In 1960, the contribution of agriculture to GDP was almost 31 per cent but because of the relatively low growth of agricultural production – 2.8 per cent per year – during the last two decades, it dropped to 19 per cent in 1978. The disproportionately large share of agriculture in total employment in relation to the sector's share in total value added reflects the low productivity in this sector. Overpopulation, coupled with the limited amount of agricultural land available in Asia, the large subsistence sector in Africa and inefficient systems of land tenure in several countries in Latin America, are among the factors responsible for the low productivity. The labour productivity gap, measured as the ratio of productivity per economically active person in developed market-economy countries to that of developing countries, is largest in this sector, where it was 11 in 1978. The productivity gap has widened by 50 per cent within the last two decades, reflecting the high productivity increases in this sector in developed market-economy countries.

One of the major structural transformations in developing countries that occurred in the 1960s was the reversal in the relative contributions of agriculture and industry in GDP. In 1978, the share of industry (mining, manufacturing, public utilities and construction) in total value added was almost 38 per cent. The share of manufacturing alone, which was 18 per cent, was only one percentage point lower than that of agriculture (see chart 8).

Table 10 shows the growth rates of production and labour productivity in industry (excluding construction) in developing countries. Between 1955 and 1979, total industrial output increased at an annual rate of 6.5 per cent. The pace slowed down markedly in the 1970s, the annual growth rate being 4.9 per cent, as against 7.2 per cent in the 1960s. The decline was due partly to worsening conditions of demand in the world economy. This was particularly noticeable in the extractive industries, which produce mainly for export and are thus greatly affected by the economic conditions prevailing in the industrialized countries. Another factor accounting for the decline was the balance-of-payments situation of many developing countries. Because of the difficulty of financing large deficits in recent years, many developing countries had to contain imports - a policy that primarily affected imports for industry.

Frequency distribution of average annual rates of growth of GDP per capita for developing countries, 1960-1970 and 1970-1978



Source National accounts data from United Nations Department of International Economic and Social Affairs

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CHART 8

## Structure of production in developing countries, 1960, 1970 and 1978 (Percentage of GDP in current US dollars)



Source: United Nations Handbook of World Development Statistics (PPS/QIR/5/1980).

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#### TABLE 10

Developing countries: annual average rates of growth of production and labour productivity in industry<sup>a</sup>

	1955-1979	1960-1970	1970-1979
Production			
Total	6.5	7.2	4.9
Extractive industries	6.3	8.3	2.4
Manufacturing industries .	6.6	6.4	6.5
Light	4.9	4.6	5.0
Heavy	8.7	8.8	7.9
Utilities	10.9	11.4	10.6
•	(1955-1976)		(1970-1970
Labour Productivity <sup>b</sup>			
Total	1.9	1.9	1.4
Extractive industries	2.9	4.1	-0.2
Manufacturing industries .	1.7	1.6	1.3
Light	1.2	1.2	0.7
Heavy	3.6	3.8	3.2

Sources: UNCTAD secretariat calculations, based on figures from United Nations, Statistical Yearbook 1969 and 1978 and United Nations, Monthly Bulletin of Statistics, May 1981.

<sup>a</sup> Mining (-extractive industries), manufacturing, electricity, gas and water.

<sup>b</sup> Data for labour productivity in utilities are not available.

Overall productivity in industry increased at an annual rate of less than 2 per cent during 1955–1976 so a large proportion of production gains could be attributed to the expansion of employment. However, the overall figure hides sectoral differences. In the 1960s, the extractive industries registered one of the highest rates of productivity growth among the industrial sectors, namely, over 4 per cent per year. Lower capacity utilization resulting from a reduction in demand led to declines in productivity in the 1970s. The productivity gap in mining with developed market-economy countries, estimated at 1.9 in 1975, is smaller than for the rest of the economy.

Between 1955 and 1979, manufacturing output increased at the rate of 6.6 per cent per year. The fastest growing sector was heavy industry, with an annual growth rate of 8.8 per cent in the 1960s, and although the pace slowed down in the 1970s, it was still an impressive 7.9 per cent. This reflects the high productivity increases in the sector. By 1975, heavy industry already accounted for more than one-half of total manufacturing production. In manufacturing, the productivity gap with developed marketeconomy countries averaged 7.3 in 1975, with a level of 8.2 in the consumer goods industries as against 5.8 in the capital goods industries. It should be noted that much of the growth in manufacturing could be attributed to the fast-growing exporters of manufactures, which accounted for over 48 per cent of the manufacturing value added in developing countries in 1978. During the period 1960-1978, manufacturing value added in this group of fast-growing exporters increased at an average annual rate of over 8 per cent.

Industry in the developed market-economy countries, through direct investment and contracting and royalty arrangements, played a significant role in promoting industrialization in developing countries, especially in the fastest growing sectors. Dependence on foreign technology carries a high price. Direct payments by developing countries for the use of patents, licences, trade marks, process know-how and technical services amounted to \$US1.8 billion in 1968, and probably now stand at \$US9-10 billion. The direct costs, however, constitute only a part of the total costs. The indirect costs resulting from overpricing of imports of intermediate products and equipment, profits on capitalization of know-how and price mark-ups are much heavier. In addition, there are other real costs, or benefits forgone, as a result of delayed or inadequate transfers, the transfer of inappropriate technology and, above all, the nontransfer of technology. It is estimated that the total cost of technological dependence may be as high as \$US30-50 billion a year.<sup>30</sup>

#### 3. Savings and investment

An important indicator of development effort is the ratio of gross domestic capital formation to GDP. In the early 1950s, this ratio was around 10–12 per cent for all developing countries, rising to an average of 18 per cent in the 1960s and 24 per cent in the 1970s. In 1978, gross domestic investment was almost 27 per cent of GDP, an impressive gain over the 20 per cent ratio in 1970 and a rate higher than that 22 per cent in the developed market-economy countries. The ratio of gross domestic savings to GDP was 23 per cent in the period 1960–1978 for all developing countries.

Clearly, these figures are influenced by the performance of the oil-exporting countries, which have a 39 per cent savings ratio. Strictly speaking, the savings performance of those countries simply reflects a change in the composition of wealth from resources in the ground to liquid financial assets. Table 11 shows the gross domestic savings and investment of

#### TABLE 11

Savings and investment in non-oil exporting developing countries (As percentage of gross domestic product)

	1960- 1978	1960- 1969	1970- 1978
Non-oil exporting developing countries			
Gross domestic capital formation	21.6	18.3	22.9
Gross domestic savings	18.9	16.7	19.9
Foreign savings	2.7	1.6	3.0
Least developed countries			
Gross domestic capital formation	12.8	11.4	13.5
Gross domestic savings	8.2	10.2	7.1
Foreign savings	4.6	1.2	6.4

Source: United Nations, Handbook of World Development Statistics, 1980. (PSS/QIR/ 5/1980.)

non-oil-exporting developing countries, distinguishing separately the least developed countries. In the last two decades, the share of gross domestic investment to GDP in these countries averaged 22

<sup>&</sup>lt;sup>30</sup>"Formulation of a strategy for the technological transformation of developing countries. Proposals for an outline – Note by the UNCTAD secretariat" (TD/B/779), February 1980, para.2(vii).

per cent and the average domestic savings rate was 19 per cent. Thus, almost 88 per cent of investment needs was financed by domestic savings and only 12 per cent was accounted for by foreign savings. There was a slightly higher reliance on foreign financing in the 1970s. The ratio of foreign savings to GDP increased from 1.6 per cent in the 1960s to 3.0 per cent in the 1970s. This reflects the rapid build-up of investment in the 1970s which outstripped the fast growth of savings.

The experience of individual countries and groups of countries has varied widely. In particular, the least developed countries have raised the ratio of their gross domestic capital formation to GDP from 11.4 per cent in the 1960s to 13.5 per cent in the 1970s. However, domestic savings failed to keep pace, and their ratio to GDP actually fell from 10 per cent in the 1960s to 7 per cent in the 1970s. The growing gap between domestic investment and domestic savings was covered by capital inflows, which accounted for almost 50 per cent of total investment requirements in the 1970s.

The inflow of foreign savings represented by net capital transfers from developed to developing countries has increased substantially in both nominal and real terms. However, the volume of these flows was not sufficient to fill the gap between the investment needs and domestic savings capacity of developing countries, as was necessary for the attainment of the growth targets set in the International Development Stategy for the Second United Nations Development Decade. Moreover, the composition of these flows underwent dramatic changes in the 1970s, with private flows becoming the major source of finance.

In the 1960s, as can be seen from annex table A.7, official development assistance (ODA) represented more than 50 per cent of total financial flows from Development Assistance Committee (DAC) member countries to developing countries. By the end of the decade, the share of ODA had begun to decline steadily.<sup>31</sup> In the 1970s (see annex table A.8), the decline was accentuated, and ODA represented, on average, about 38 per cent of total flows.

With respect to the ratio of ODA to GNP, the performance of individual donor countries, with the exception of Denmark, the Netherlands, Norway and Sweden, was far from satisfactory. The ratio of ODA to GNP for all DAC countries declined from a level of 0.64 per cent in 1961 to 0.32 per cent in 1979, which was substantially short of the 0.7 per cent target set by the International Development Strategy.

Non-concessional flows, on the other hand, have substantially grown in importance and by the end of the 1970s represented about 70 per cent of total flows. The shares of the different components have also changed. Thus, direct investment played an important role in the 1960s and represented, on average, about 20 per cent of total net flows or about 60 per cent of private flows from DAC member countries. In the 1970s, its importance decreased somewhat in comparison with other non-concessional flows and accounted for about 18 per cent of total net flows. As for export credits, they steadily increased in the 1960s and continued their upward trend in the next decade, reflecting their importance as a means of gaining export markets.

The most striking development, however, was the tremendous rise in bank lending in the 1970s.-Since 1973 the Eurocurrency markets have generated large flows of funds to developing countries. However, access to these markets was quite limited, being concentrated in a few upper- and middle-income developing countries. Moreover, the rate of interest charged fluctuated with the conditions of the markets and, by the end of the decade, had dramatically increased with the drastic increase in short-term interest rates on international capital markets.<sup>32</sup> As a result, interest payments of developing countries substantially increased and as a proportion of total net long-term flows, rose from 16 per cent in 1970 to 36 per cent in 1979.

#### 4. Growth and structure of trade

Table 12 presents some basic foreign trade indicators for developing countries. The annual growth in export volume between 1948 and 1960 was 4.4 per

#### TABLE 12

#### Foreign trade indicators for developing countries (Annual percentage rates of change)

volume	Import volume	Purchasing power of exports	Terms of trade
			0.8
••••		•·	-0.2
3.1	7.3	10.0	6.8
8.6	4.7	7.2	-1.3
-1.4	14.3	17.9	19.6
5.1	5.6	5.7	0.6
7.6	4.8	4.5	-2.9
5.8	6.9	7.0	1.1
11.8	7.1	8.2	-3.2
4.4	5.5	3.6	-0.8
		- 2.2	-1.8
	-1.4 5.1 7.6 5.8 11.8	6.4       5.4         3.1       7.3         8.6       4.7         -1.4       14.3         5.1       5.6         7.6       4.8         5.8       6.9         11.8       7.1         4.4       5.5	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Source UNCTAD secretariat calculations, based on various international sources

cent. Stimulated by the expansion of demand in developed countries, export growth accelerated in the 1960s to 6.4 per cent. However, there was a sharp deceleration in the 1970s because of cut-backs in the

<sup>&</sup>lt;sup>31</sup>Because of problems of data availability the discussion of financial flows in the 1960s is restricted to the analysis of net long-term financial flows from DAC member countries to developing countries.

<sup>&</sup>lt;sup>32</sup>As is noted in Part I, the six-month LIBOR in US dollars increased from 12 per cent in 1978 to 16 per cent in 1981.

volume of oil imports following the rise in oil prices, which affected the export growth of the oilexporting countries.

For non-oil-exporting developing countries, the growth in export volume was 7.6 per cent in the 1970s, which was considerably higher than the 5.1 per cent growth attained in the 1960s. However, with the worsening terms of trade, this represented an increase of only 4.5 per cent annually in the purchasing power of exports.

There are marked differences in the performance of different groups of developing countries. The volume of exports from the fast-growing exporters of manufactures registered an annual increase of almost 12 per cent in the 1970s, surpassing by an appreciable margin the 7 per cent export growth target set for the Second United Nations Development Decade, and representing more than a twofold increase over the rate of 5.8 per cent achieved in the 1960s.

For the least developed countries, there was a yearly decrease in export volume of 0.4 per cent in the 1970s. This compares unfavourably with their export performance in the 1960s when they recorded an annual growth of 4.4 per cent. With the deterioration in the terms of trade, the purchasing power of exports declined at an annual rate of 2.2 per cent in the 1970s.

The growth rate of the volume of imports into developing countries was 5.3 per cent between 1948 and 1960. There was a slight acceleration to 5.4 per cent in the 1960s, and the rate then rose quickly in the 1970s. The rapid annual growth of 7.3 per cent in that decade was due to the sharp rise in imports by the major oil exporters and the fast-growing exporters of manufactures.

The shares of the major economic groupings in world trade are given in annex table A.4. The developing countries' share in world exports decreased steadily from 31 per cent in 1950 to less than 18 per cent in 1972 owing to the relatively higher export growth of the developed market-economy countries. However, this trend was reversed in 1973, following the rise in the price of oil and the slowdown in the economic growth of the developed countries. By 1980, the developing countries had recovered a substantial portion of their lost share, and accounted for 28 per cent of world exports.

The rapid expansion of exports from the fastgrowing exporters of manufactures is reflected in the rising share of this group in world exports from 3.9 per cent in 1960 to 4.9 per cent in 1980. For this group, trade has been the main engine of growth and exports of manufactures have been rising rapidly since the late 1960s. A factor mentioned earlier which contributed to its success was its flexible response to adverse global economic circumstances. This flexibility was manifested when some of the fast-growing exporters of manufactures, faced with intensified protectionist measures on the part of developed countries, reacted by product diversification and by moving some industries to other developing countries not yet threatened by such measures.

The developing countries' share of world imports declined substantially from 27 per cent in 1950 to 16.5 per cent in 1972. In the 1970s, the most dynamic countries in international trade were the major oil exporters and the fast-growing exporters of manufactures as is evidenced by their rising share not only of world exports but also of world imports. The share of the former in world imports almost doubled between 1970 and 1980 from 3.3 per cent to 6.5 per cent, while that of the latter increased from 4.3 per cent to 5.8 per cent over the same period. Thus, whereas the shares of the developed marketeconomy countries and socialist countries registered declines, that of developing countries as a whole increased from 17 per cent in 1970 to 21.5 per cent in 1980.

In terms of commodity groups, the share of developing countries in the world market for primary commodities excluding fuels, dropped to 29 per cent in 1979 from 32 per cent in 1965. However, developing countries dominate the fuel market, accounting for 71 per cent of world fuel exports in 1979. Although their exports of manufactures are still a minor fraction of world exports of manufactures, this commodity group has shown the fastest growth, and the developing countries' share rose steadily from 5 per cent in 1965 to almost 9 per cent in 1979.

Trade balances of developing countries by commodity group are presented in table 13. The developing countries had an overall trade surplus of over \$50 billion in 1979, arising from a surplus in their trade in primary products of \$210 billion – over 85 per cent of which was accounted for by the oil surplus – and a deficit in trade in manufactures of \$158 billion. This represents a remarkable improvement over the 1970 deficit of \$3 billion. However, for non-oil-exporting developing countries the overall trade deficit increased ten-fold between 1965 and 1979. This mainly reflects the sharp increase in their

TABLE 13

Trade balances of developing countries, by commodity group (In billions of US dollars)

411 4 1 1 1				
All developing countries				
Total	-1.1	- 3.2	10.2	51.6
Primary commodities, excl.				
fuels	10.7	15.1	17.8	30.5
Foodstuffs	4.4	6.0	6.1	11.8
Industrial raw materials	6.3	9.0	11.7	18.7
Fuels	8.0	13.5	96.5	179.4
Manufactures	-19.7	-31.8	-104.1	- 158.2
Non-oil exporting developing cou	ntries			
Total	-6.3	-11.7	-45.7	- 66.6
Primary commodities, excl.				
Fuels	10.0	14.5	22.6	35.8
Foodstuffs	4.5	6.2	10.8	18.9
Industrial raw materials	5.5	8.3	11.8	16.9
Fuels	-1.0	- 1.8	-10.4	- 19.1
Manufactures	-15.3	-24.4	- 57.9	-83.3

Source For the basic data, United Nations, Monthly Bulletin of Statistics, May 1981

CHART 9

#### Share of major economic groups in total world trade, 1960-1979 (In percentages)



Source: UNCTAD Handbook of International Trade and Development Statistics, Supplement 1980 (United Nations publication, Sales No. E/F.80.11.D.10 and corrigendum).

deficit in fuels and manufactures which was not compensated for by the threefold rise in their trade surplus in non-fuel primary commodities.

The commodity composition of exports and imports of developing countries is presented in chart 10 and annex table A.5. Primary products still account for the bulk of their exports, amounting to almost 80 per cent of the total in 1979. Among these there was a reversal in the shares of fuel and nonfuel products. Whereas in 1965 the share of non-fuel primary products had been 54 per cent, it dropped sharply to less than 23 per cent in 1979. The corresponding figures for the share of fuel exports are 31 per cent and 57 per cent, respectively. There has been a steady increase in the share of manufactures in total exports from 15 per cent in 1965 to over 20 per cent in 1979.

The expansion in exports of manufactures, a sign of rapid industrialization, was dominated by the fast growing exporters of manufactures, which accounted for 62 per cent of such exports from all developing countries in 1977. Although labour-intensive products in which they have a comparative advantage, such as clothing, footwear and electronics, constituted the bulk of their exports of manufactures, they have started to penetrate the markets of more advanced capital-intensive industries such as shipbuilding, machinery and basic chemicals.

As far as the commodity composition of imports is concerned, manufactures accounted for 67 per cent of the total in 1979, a share which has remained fairly stable in the last two decades. A measure of the degree of external dependence on the supply of capital goods and on the technology embodied in these goods is the share of imports of machinery and transport equipment in total imports, which was 33 per cent in 1979.

#### B. Payments imbalances and the adjustment process in the 1970s

Developing countries are net capital importers in the normal course of events. Long-term capital inflow is required to finance the import surplus which arises from efforts to speed up the process of development. The current account deficit, which is the counterpart of those capital inflows and is often called the "development deficit", should not be confused with deficits that are induced by shortfalls in the purchasing power of exports occasioned by cyclical movements of output and prices. Such deficits can be financed through short or medium-term credits which may be paid back during the upswing of the cycle when export earnings overages occur.

The decade of the 1970s was characterized by unusual and sharp changes in the prices and volumes of internationally traded goods. While the exact nature of these changes did not become apparent immediately, it is now clear that they contained a large component which was not purely of a cyclical nature. Indeed, much of the change in volumes and prices resulted from shifts in the underlying secular trends. In the first instance, the longterm trend of demand for exports of developing countries has experienced a pronounced downward shift as a result of the declining growth trend of demand in the OECD economies. Moreover, persistent inflation and substantial adjustments in the relative prices of key commodities, in particular energy, have altered the cost structure of production as well as the composition of balances of payments in an irreversible manner.

On the other hand, for several developing countries whose economies depend heavily upon the production and export of hydrocarbons, the structural shifts in international trade and prices have given rise to substantial export surpluses. Strictly speaking, these surpluses did not result from excess saving out of current production; rather, they reflect a shift in the composition of the wealth of those countries from oil in the ground to financial assets.<sup>33</sup> The adjustment problem that these countries face is twofold: first, to find financial outlets which will protect the real value of their assets and will ensure a satisfactory rate of return on them and, secondly, to establish an infrastructure that will make it possible to diversify domestic production.<sup>34</sup>

For the majority of developing countries, however, the events of the 1970s have given rise to exceptionally large current account deficits. As a result, these countries face the dual problem of finding adequate balance-of-payments finance on appropriate terms and conditions and of initiating a process of structural adjustment internally consistent with the new international environment. Full awareness of the structural nature of the problem involving and hindering the efforts of development has come about only gradually; the financial support to increasing high external imbalances was often provided on the assumption that their causes were temporary shortfalls of export purchasing power, which would be subsequently offset by overages which, it was believed, an upswing in the trade cycle was bound to produce. It was only towards the end of the decade that it came to be generally recognized that the balance of payments financing relates in fact to requirements for structural adjustment that will reverse the underlying balance-of-payments trends only in the long run.

With regard to the requirement for structural adjustment, developing countries have found it difficult to move decisively with specific programmes even when adequate financing could be obtained. For one thing, uncertainties and instability prevailing in the world economy made it extremely difficult to decide which sectors should be given invest-

<sup>&</sup>lt;sup>33</sup>It should be noted that, had those countries decided to curtail production and exports of oil rates that cover only their current import needs, the world economy would have experienced an acute energy shortage.

<sup>&</sup>lt;sup>34</sup>For an examination of the adjustment problems facing these countries, see "Development and the members of the Organization of the Petroleum Exporting Countries (OPEC)", study by Mr. Abdelkadar Sid Ahmed (TD/B/C.3/145). The question of protecting the real value of these financial assets is the subject of a forthcoming study by the UNCTAD secretariat, provisionally entitled "External assets of developing countries: their protection and management".

#### CHART 10

## Structure of trade of developing countries, 1965 and 1979 (Percentages of total)







Source United Nations Monthly Bulletin of Statistics May 1981

ment priority. This problem has been accentuated by uncertainties concerning access of exportable produce to the markets of developed countries, as well as by difficulties in foreseeing future trends with regard to costs and prices.

#### 1. Balance-of-payment adjustment by net oil-importing countries

The problems mentioned above were particularly noticeable in the case of net oil-importing developing countries, whose experience is reviewed below.

Table 14 provides estimates of the current account deficit of net oil-importing developing countries in the decade of the 1970s and illustrates the contributions of various factors to its increase. The combined current account deficit experienced a dramatic increase over the decade and in 1980 stood at \$68 billion. This upward trend has been associated with wide fluctuations which, broadly speaking, have followed the profile of the business cycle of developed market-economy countries. Thus, deficits increased sharply during the 1974–1975 recession as well as during the current slowdown which started in 1979, but receded during the upswing periods of 1972–1973 and 1976–1978.

The contributions of the various components to the current account deficit varied. The volume of exports was clearly linked to fluctuations due to the international trade cycle. Indeed, the volume of exports grew at fairly rapid rates in 1972–1973, a peak year for the OECD economies, but reached a standstill in 1974–1975 when those economies slid into a deep cyclical trough. The recovery of the OECD economies in 1973 as well as their slowdown in recent years are clearly reflected in the growth of the export volume.

Export prices were affected both by conditions of world demand and by the inflationary pressures that pervaded the world economy during the 1970s. Reflecting high levels of commodity demand and strong inflationary pressures, export prices increased sharply up to 1974 and again in 1977, lagging the international upswing by one year; they regained momentum in 1979 and 1980 as the world economy faced another surge of inflationary pressures. On the other hand, export prices suffered a setback in the years 1975, 1976 and 1978, largely reflecting, albeit with a time-lag, weakening demand conditions in developed market-economy countries.

Reflecting world inflationary pressures, import prices have steadily increased. They showed particularly sharp increases in 1973, 1974 and 1979–1980. As can be seen from table 14, prices of manufactured goods have exerted continuous pressure on the import price index for developing countries. The impact of petroleum, on the other hand, is concentrated in the years 1974 and 1979–1980.

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
				Value	, billions d	of US doll	ars			
1. Changes in current account of which:	3.0	-2.7	0.3	15.4	3.8	-9.3	-2.5	10.4	14.3	20.1
I.I Changes in trade balance deficits <sup>a</sup>	3.1	-2.8	0.1	13.3	3.6	-7.3	-0.2	8.4	10.3	13.9
<ol> <li>Factors contributing to changes in trade balance<sup>b</sup></li> </ol>										
2.1 Net volume effect	1.1	-3.5	-0.1	8.3	-0.8	- 10.1	5.5	1.6	-7.1	-14.4
Export volume	0.6	-2.4	- 4.1	0.1	-0.3	- 9.2	-1.3	-7.2	- 5.0	- 1.5
Import volume	0.5	- 1.1	4.0	8.2	-0.5	- 0.9	6.8	8.8	- 2.1	-12.9
2.2 Net price effect	2.0	0.7	0.2	5.0	4.4	2.8	- 5.7	6.8	17.4	28.3
Export price	-0.1	- 1.7	-7.7	- 16.0	0.3	-0.1	- 11.0	0.0	- 12.4	- 16.5
Import price	2.1	2.4	7.9	21.0	4.1	2.9	5.3	6.8	29.8	44.8
					Percent	tage				
3. Contribution to total import price										
effect	100	100	100	100	100	100	100	100	100	100
oil)	14	23	23	14	- 10	5	21	11	14	13
Manufactures	63	81	58	40	93	40	68	93	47	33
Petroleum	23	∫ <u>−</u> 4	19	46	[ 17	55	{ 11	-4	39	54
4. Memo item:				Value	, billions o	of US <sub>_</sub> dolld	ars			
Changes in invisibles and factor income payments	0.3	0.0	1.6	2.4	1.0	1.7	1.1	3.1	4.4	

TABLE 14

Net oil-importing developing countries: changes in current account deficits and factors contributing to changes in them (Billions of US dollars)

Source. UNCTAD secretariat estimates.

<sup>a</sup> Based on a sample of 63 net oil-importing developing countries accounting for 90 per cent of total exports in 1979.

<sup>b</sup> The volume effect is qX(1+p) and the price effect pX, where X stands for the

volume of exports in the previous year, q for the percentage change in export volume and p for the percentage price change in exports. The summation of these two effects expresses the change in the value of exports, given by X/(1+p)(1+q) - 1/. The relationship for imports is analogous.

The salient features associated with the variations in the purchasing power of exports of net oilimporting developing countries during the decade of the 1970s (see chart 11) may be summarized as follows:

- (a) There has been a systematic tendency for the shortfalls in the purchasing power of exports to increase over successive periods of the downswing. Thus, the shortfall in terms of trend values amounted to 2.5 per cent during the period 1970-1971, 14 per cent in 1974-1975 and 18 per cent in 1979-1980;
- (b) The overage experienced during the upswing in 1976-1978 was not high enough to offset the shortfall experienced during the previous downswing;
- (c) With the exception of the period 1970-1971, when the terms of trade improved somewhat, both the terms of trade and export volumes moved in the same direction, falling during periods of the downswing and rising during the upswing;
- (d) While in 1974-1975 the shortfall was due in almost equal proportions to the terms of trade and export volume effects, in 1979-1980 most of the shortfall was attributable to the termsof-trade effect;
- (e) In both periods of upswing (1972–1973 and 1976–1978), the dominant force accounting for overages in the purchasing power of exports was the export volume effect, with the terms of trade playing only a minor role.

The deterioration of the trend in the purchasing power of exports during the 1970s is reflected in changes in policy responses on the part of developing countries with regard to both imports and external finance. Thus, during the periods of downswing in 1970-1971 and 1974-1975, net oilimporting developing countries did not reduce their imports in the face of shortfalls in the purchasing power of exports (see chart 3). On the contrary, their imports rose at rates above the trend, thanks to their recourse to external borrowing. The effort to keep import growth unaffected by downward phases of the cycle, however, was checked in the following periods. Indeed, the upswings of 1972-1973 and 1976-1978 witnessed sizeable contractions in the volume of imports. While a lagged response to imbalances may partly account for this behaviour, growing difficulties in financing much larger deficits for a sufficiently long period explain this pattern. The increasing difficulties faced by developing countries in securing development and payments finance to offset shortfalls in the purchasing power of exports are underlined by the containment of imports which has taken place during 1979-1980. During this downswing, the major part of the adjustment, nearly 90 per cent, was carried out by reducing the volume of purchases from abroad.

While the experience of net oil-importing developing countries sketched above has been broadly shared by those which are also MSA or least developed, the last two groups experienced problems which have given rise to special concern. Since their

exports in particular have been both price and demand elastic, their exposure to the vicissitudes of the external environment has been particularly severe. Particularly disturbing was the reduction of imports which in real terms contributed substantially to an actual decrease in the current account deficit in 1971-1972, in 1976 and again in the last two years of the decade. For this group of countries, the evidence is clear: adjustment to adverse economic conditions has been carried out mainly by constraining import growth and restraining the capacity of the economy for rapid growth. The difficulties in financing current deficits which explain the severe adjustments undertaken through import containment are largely due to the fact that the traditional sources of finance of these countries failed to expand in a significant manner.

The pattern of financing the current account deficits (see annex table A.10) largely reflects the changes in the structure of financial flows to developing countries that began to take place in the early 1970s. Until 1973, the growth of official flows, both on concessional and non-concessional terms, and of multilateral disbursements, was such as to keep their share in financing current account deficits at between 50 per cent and 70 per cent. Private longterm flows provided the balance of the total. This pattern of financing changed dramatically with the sharp increases in deficits which took place after 1973. Notwithstanding some expansion in official flows in 1974 and 1975, their rate of growth remained well below that of current account deficits and actually fell in subsequent years. Similarly, while multilateral lending rose rapidly during the earlier part of the decade, its expansion slowed down, reflecting the difficulties encountered by these lending institutions in expanding the rate of their disbursements. While flows from OPEC countries in the context of their programme of economic cooperation with other developing countries have assumed increasing importance for many developing countries, their growth has not been sufficient to offset the continuing decline in the share of official flows from developed countries and multilateral institutions. Consequently, increased reliance has had to be placed on private long term flows, which became the dominant source of external financing for developing countries as a whole.

Greater recourse to the private capital market remained, however, an option only to a relatively small number of developing countries, as market perception of creditworthiness largely determined their volume and distribution. Thus, in 1980, 10 major developing country borrowers accounted for about 70 per cent of the total lending by international commercial banks. Wide concern has been expressed as regards the implication of the concentration of flows in a small number of developing countries on the one hand, and the viability of a financing strategy based on the capacity of borrowing countries to continue to absorb funds at the current interest rates, on the other.

The International Monetary Fund, which was established to assist member countries to redress balance-of-payments disequilibria, played a relatively modest role during the decade. While the level of its CHART 11

#### Average annual shortfalls in purchasing power of exports<sup>a</sup> and their contributory factors<sup>b</sup> for net oil-importing developing countries, 1970-1980 (Percentages)



Source: UNCTAD secretariat calculations.

Percentage deviation from trend of purchasing power of exports.
 Percentage deviation from trend of purchasing power of exports due to changes in the volume of exports and in the terms of trade.

- lending was not substantial, its support was mainly concentrated in the years of most acute distress. Indeed, member States were reluctant to seek IMF credit and did so only as a last resort. The reason for this is to be sought in the fact that both the basis of IMF resources and the terms and conditions attached to drawings were not in keeping with the kind of structural deficits that member States experienced in the 1970s. Recently, however, IMF has taken a series of steps with a view to bringing its policies and resources into line with the adjustment problems facing developing countries. While it is too early to assess the impact of the new policies, it must be stressed that the need for adequate balance-ofpayments support from multilateral sources should now be viewed as a matter of urgency.

The conclusions that emerge from the above discussion may be summarized as follows. First, in the face of the large increases in current account deficits, net oil-importing developing countries resorted to a combination of adjustment and debt accumulation. Secondly, and directly stemming from short-comings in the international financial system, the MSAs and the least developed countries were constrained to compress import volumes and long-term growth. Thirdly, countries able to secure non-official finance were able to avoid major disruption in their development programmes but in the process have begun to face increasing difficulties in pursuing a strategy of long-term financing in view of the high borrowing costs and uncertainties in capital markets. Fourthly, the contribution of the IMF to meeting the payments needs of its members has, so far, been modest.

#### 2. Debt accumulation and debt servicing costs

An immediate consequence of the shift in the pattern of financing the current account deficits of net oil-importing developing countries noted earlier has been a faster accumulation of external debt. In the case of net oil-importing countries for which data on medium and long-term public and publicly guaranteed debt are available (table 15), it can be seen that between 1967 and 1974 total debt outstanding grew at an average of 16 per cent per annum but during the period 1974-1979 reached 24 per cent per annum.

The rapid growth of indebtedness has been accompanied by major changes in the composition of the debt outstanding and in the attendant debt-servicing obligations. As regards the composition of debt, the dominant feature of borrowing in the 1970s was the increased importance of private sources of financing. In 1967, the share of private funds in the total debt outstanding amounted to about 24 per cent; by 1974 it had grown to 32 per cent and is estimated to have been more than 50 per cent in 1980. Within private flows, commercial bank lending has emerged as the most important source. Whereas it constituted 24 per cent of total private flows in 1967, it is estimated to have constituted over 80 per cent of these in 1980.

As a corollary to the changes in the structure of external debt, debt-servicing obligations have increased rapidly; during the period 1967-1974 debt service grew at about 18 per cent per annum; and, during the period 1974–1979, it accelerated to 32 per cent per annum. While the increase in debt service can be attributable both to an increase in the volume of debt and to the higher cost of borrowing, the latter is assuming greater importance.

#### TABLE 15

# Selected indicators of debt and debt service of net oil-importing developing countries: 1967, 1970, 1974 and 1979

Indicator	1967	1970	1974	1979	
Debt service/Debt outstanding a		(percentages)			
Total		11.0	12.5	16.8	
MSAs		7.0	7.5	6.7	
LDCs		5.4	5.1	4.1	
Debt service/Exports of goods an	d service				
Total for the second sec		12.0	9.5	19.5	
MSAs		14.0	11.6	22.1	
LDCs		7.9	8.2	14.9	
Interest/Exports of goods and set	rvices				
Total		3.7	3.4	7.0	
MSAs		4.5	3.5	8.0	
LDCs		2.7	2.8	5.3	
Interest/GDP Total		0.5	0.6	1.3	
of which: MSAs		0.4	0.4	0.6	
		0.4	0.4	0.5	
Debt outstanding/GDP					
Total		15.5	15.4	25.9	
MSAs		19.4	19.4	28.1	
LDCs		15.9	19.8	39.6	
Debt outstanding/Reserves Total		352.4	299.7	368.1	
MSAs		709.1	704.1	533.3	
LDCs		393.5	493.9	532.4	
Memo item	(in	billions o	f US doll	ars)	
Debt outstanding <sup>b</sup>	30.5	45.2	86.1	261.5	
Official	23.1	32.4	58.8	145.4	
Private	7.3	12.8	27.3	116.1	
Debt service	2.8	4.5	8.8	35.7	
Amortization	2.0	3.1	5.6	22.7	
Interest	0.8	1.4	3.2	13.0	

Source: UNCTAD secretariat calculations, based on data provided by the United Nations Statistical Office and the World Bank.

<sup>a</sup> Ratio of debt service in the current year to debt outstanding in the previous year. <sup>b</sup> The data refer to disbursed and undisbursed public and publicly guaranteed external debt as reported to the World Bank.

With respect to borrowing costs, table 16 shows the changes in the average terms of lending to developing countries. As a result of shortening maturities and widening borrowing margins, the total grant element<sup>35</sup> of loan commitments on account of both official and private credits was systematically eroded throughout the 1970s. Whereas it averaged about 36

<sup>&</sup>lt;sup>35</sup>For the definition of the grant element, see the note  $^{b}$  to table 16.

per cent in the 1960s – and was well above the current ODA norms on concessionality – it declined in each of the years since 1970, from 31 per cent at the start of the decade to about 7 per cent by 1979. As disbursed loans mature and an increasing share of new borrowings takes place at variable interest rates, the overall terms of borrowing are likely to harden further.

#### TABLE 16

Average terms of loan commitments to developing countries of official and private creditors

Year	Amount <sup>a</sup> committed (billions of US\$)	Interest rate (per cent)	Maturity (years)	Grant element <sup>b</sup> (per cent)
1965	7.0	4.0	19.9	40
1966	6.9	4.1	21.0	41
1967	8.3	4.6	17.1	34
1968	8.4	4.7	19.6	36
1969	9.1	5.1	18.6	33
1970	14.1	5.3	19.3	31
1971	15.9	5.7	18.0	28
1972	20.2	5.6	17.6	27
1973	27.1	6.6	18.5	23
1974	40.8	7.1	17.1	20
1975	46.3	6.9	15.4	20
1976	57.1	6.8	14.5	18
1977	62.5	6.9	14.0	18
1978	81.5	7.9	14.7	14
1979	88.0	9.5	14.0	7

Source: UNCTAD secretariat calculations, based on World Bank: World Debt Tables, various issues.

<sup>a</sup> This column refers to flows on which information on loan terms is available for the period 1965-1979.

In the case of loans, the grant element is obtained by taking the difference between the face value of a loan and the discounted present value of the stream of repayments, and the difference is then expressed as a percentage of face value. Thus, when the interest rate on a loan equals the rate of discount (the DAC practice is too apply a uniform rate of 10 per cent) the grant element is zero.

The question of the capacity of the developing countries to service their mounting external obligations has become more critical because of their growing trade deficits, the rising cost of external borrowing and doubts about the capacity of the banking system to continue intermediate at the same pace as in the 1970s. A widely accepted measure of a country's capacity to service its debt is the debt-service ratio. As may be seen from table 15, this ratio deteriorated in those countries during the period 1970-1979; since 1974, the ratio increased each year and in 1979 debt servicing was equal to about 20 per cent of their exports of goods and services. As the amortization component of debt servicing is, as a rule, rolled-over, it is interesting to examine the interest-service ratio (i.e., the ratio of interest payments to exports of goods and services). The same table shows that this ratio remained roughly constant for the net oil-importing developing countries and the least developed countries during the period 1970-1974 and actually fell slightly for the MSAs. Since then, however, it has doubled for net oilimporting developing countries as a whole – rising from 3.4 per cent in 1974 to 7 per cent in 1979; for the MSAs the increase was even greater - from 3.5 per cent to 8 per cent. Also of interest is the relationship between interest charges and gross domestic product. This ratio provides a useful measure of the burden placed by servicing obligations on the productive capacity of the economy. As may be seen from table 15, while this ratio remained roughly constant between 1970 and 1974, it increased rapidly from 1974 onwards and for net oil-importing developing countries as a whole accounted for just over 1.3 per cent of GDP in 1979 compared with 0.5 per cent in 1970.<sup>36</sup>

The influence of the sharply growing volume of debt and debt servicing in the context of a deteriorating international economic environment has meant that a growing number of developing countries are encountering difficulties in managing their external debt. Indeed, in a number of cases, the difficulties have led to the reorganization of their debt in a multilateral context. Since 1956, 16 developing countries have been involved in 47 multilateral debt renegotiations but, during the period 1975–1980, as many as 11 countries were involved in 18 renegotiations.

As a result of the detailed intergovernmental deliberations in UNCTAD on the scope and nature of multilateral debt reorganization, a wide consensus has emerged on dealing with future debt operations. Thus, on the basis of Trade and Development Board resolutions 132 (XV) and 165 (S–IX), section B, and resolution 222(XXI) adopted more recently by the Board, a coherent framework has now been built to deal with the process of reorganizing the official bilateral debt of interested developing countries.

In section B of Board resolution 165 (S-IX), four basic concepts common to various approaches to debt reorganization were identified. These approaches form the essential elements of the agreed guidelines embodied in Board resolution 222 (XXI). Thus, from an institutional standpoint, policy measures to deal with this aspect of the debt problem appear to have been strengthened. Nevertheless, considerable scope remains for further evolving this framework, so as to take into account the totality of external debt, including private debt.

#### C. Economic co-operation among developing countries

For a long time the economies of developing countries were linked through a "vertical division of labour" to their respective metropolitan countries in a bipolar relationship which severely limited the evolution of trade and other economic exchanges among these countries. In consequence, developing countries find themselves in a special position of structural dependence in their economic relations with their former colonial powers. This dependence is not confined to trade, but can be observed equally in other major areas of their external economic relations – money and finance, technology, international

<sup>&</sup>lt;sup>36</sup>As was noted in part I above, interest payments have increased sharply in 1980 and 1981, principally as a result of the monetary policies followed in leading economies. Thus, Eurodollar rates in London have increased from 8.7 per cent in 1978 to 12.0, 14.4 and 17.4 per cent, respectively, in 1979, 1980 and 1981.

transport, marketing and distribution, banking, insurance, etc., and thus imposes not only costs (direct and indirect) on the developing countries but also constraints on their development process. It is in this context that economic co-operation among developing countries (ECDC), based on the concept of collective self-reliance, has assumed in recent years a major significance for providing developing countries with a more autonomous role in their own development process and in world economic development as well as for bringing about necessary structural changes in the international economy.

In various international forums developing countries have expressed their determination to pursue actively the promotion of economic and technical co-operation among themselves as a basic component of efforts towards the establishment of the New International Economic Order. In this context, their commitment to the effective implementation of the Arusha Programme for Collective Self-Reliance, as well as to the programmes in those fields agreed at Mexico City, Havana and Buenos Aires, and to regional programmes, including the Lagos Plan of Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa, is of critical importance. This commitment was reinforced at the recent High-level Conference on Economic Co-operation among Developing Countries held in Caracas, Venezuela, in May 1981.

#### 1. Trends in trade among developing countries

During the 1970s trade among developing countries grew at a faster rate than their trade with the developed countries, reflecting a reversal of the earlier trend evident in the 1960s (see table 17). Between 1970 and 1979 exports of developing countries to each other increased from 20.9 per cent to 24.7 per cent of their total exports, after having fallen from 22.3 per cent in 1960. A striking feature of the expansion of trade among developing countries during the 1970s was that interregional trade grew much faster than trade within each of the major geographical regions of developing countries and consequently the share of the intra-regional component in the total trade among developing countries declined from some 70 per cent in 1970 to 52 per cent in 1979. During the 1960s, however, both the components intra-regional and interregional - had grown at almost the same rate.

Table 17 also shows the trends in trade among developing countries for all commodities excluding fuel. Here again, the data show a substantial increase during the 1970s of the share of developing countries' exports accounted for by exports to other developing countries (from 19.9 per cent in 1970 to 30.1 per cent in 1979), in contrast to the 1960s, when the share stagnated. Furthermore, while the intraregional component of this trade remained the major one, there was a tendency for the interregional component to increase relative to that of the intraregional component during the 1970s, reversing the trend of the previous decade.

A number of factors explain the rapid expansion of trade among developing countries. One was the

TABLE 17 Trends in trade among developing countries (DCs), 1960-1979

	1960	1965	1970	1975	1979
A. Values (in	ı billıon	s of US	dollars	)	
All products	1				
Intra-regional trade	4.49	5.47	7.81	24.72	53.82
Interregional trade	1.61	2.04	3.36	24.65	49.25
Total intra-trade	6.10	7.51	11.17	49.37	103.07
Total exports of DCs	27.40	35.92	55.02	211.22	416.61
Excluding fuels					
Intra-regional trade	2.81	3.61	5.48	15.83	35.82
Interregional trade	1.02	1.24	1.86	7.46	18.62
Total intra-trade	3.83	4.85	7.34	23.29	54.43
Total exports of DCS	19.80	24.64	36.89	85.65	180.86
В.	Percen	ages			
All products	1	I	1	I	1
Intra-regional trade	16.4	15.2	14.2	11.7	12.9
Interregional trade	5.9	5.7	6.1	11.7	11.8
Total intra-trade	22.3	20.9	20.3	23.4	24.7
Total exports of DCs	100.0	100.0	100.0	100.0	100.0
Excluding fuels					
Intra-regional trade	14.2	14.7	14.9	18.5	19.8
Interregional trade	5.1	5.0	5.0	8.7	10.3
Total intra-trade	19.3	19.7	19.9	27.2	30.1
Total exports of DCs	100.0	100.0	100.0	100.0	100.0

Source United Nations, Monthly Bulletin of Statistics, July 1981, and UNCTAD secretariat estimates

tendency to recession and slower economic growth in the developed countries, with a subsequent weakening of their import demand, and led to growing protectionism in developed countries which was directed mainly against low cost imports. On the other hand, developing countries as a group were able to maintain a relatively high growth of GDP during the 1970s, and thus provided each other with relatively buoyant markets for each other's exports. This pattern in the 1970s therefore represented an important departure from the experience of earlier years, and suggests a tendency towards less reliance on the growth of markets in the developed countries for the trade and economic expansion of developing countries. To what extent this tendency reflects deep-seated structural changes that are likely to persist and evolve further in the years ahead, and to what extent they reflect the special circumstances of the 1970s, is, however, as yet not entirely clear. Among the special circumstances of the 1970s that were undoubtedly important was the impact of the spectacular increase in export earnings of the oilexporting developing countries on their import capacity and import demand, and the possibilities which this opened up for new and rapidly growing export markets for other developing countries.

A second explanatory factor is that this period also witnessed a growing awareness among developing country exporters of the potential markets for their exports in other developing countries, and a more determined effort on their part to diversify their export markets. Furthermore, a number of developing countries have emerged in the 1970s as major exporters of manufactures, and have been able, to an important extent, both to penetrate the markets of developed countries for these products and to capture an increasing share of the growing markets in the developing countries. The importance of manufactures in the growth of trade among developing countries is reflected in the increasing share of manufactures in this trade (in trade excluding petroleum), rising from 26.9 per cent in 1960 to 51.6 per cent in 1979, with the strongest increase being reflected in the important product group of machinery and transport equipment, the share of which rose from 3.6 per cent in 1960 to 17.5 per cent in 1979. There was a corresponding fall in the share of food products and of agricultural raw materials (see table 18).

#### TABLE 18

Commodity structure of trade among developing countries, 1960-1979

	1960	1965	1970	1975	1979
A. Per cent of total trad	de amons	develop	ing coun	tries <sup>a</sup>	
Total	100.0 Ŭ	100.0	100.0	100.0	100.0
Food	43.2	44.4	31.3	33.4	29.0
Agricultural raw					
materials	22.9	13.8	16.4	9.8	10.0
Manufactures					
Total	26.9	34.1	42.6	48.2	51.6
Machinery and					
transport equip-					
ment	3.6	5.9	8.9	15.3	17.5
All other products b	7.0	7.6	9.7	8.6	9.4
B. Per cent of total deve	loping co	untries' e.	xports a t	o all desi	inations
Total	100.0	100.0	100.0	100.0	100.0
Food	45.5	48.6	40.1	39.4	32.4
Agricultural raw					
materials	24.7	17.9	15.1	10.1	10.9
Manufactures					
Total	12.0	17.1	24.4	35.8	44.4
Machinery and					
transport equip-				1	
ment	0.9	1.7	3.9	8.4	12.1
All other products <sup>b</sup>	17.8	16.4	20.4	14.7	12.2

Sources: United Nations, Monthly Bulletin of Statistics, July 1981, and UNCTAD secretariat estimates.

a Excluding fuels.

<sup>b</sup> Minerals, ores, iron and steel and non-ferrous metals.

Third, the dynamism in trade among developing countries was partly induced by the deliberate trade policy measures adopted by those countries comprising tariff and non-tariff measures and strenghtening of subregional and regional groupings as well as various other forms of intergovernmental cooperation.

The trends in the structure of trade among developing countries during the 1970s should, however, be seen in the light of the trend in the structure of their exports as a whole (excluding petroleum), which also shows a dramatic rise in the share of manufactures (from 12 per cent in 1960 to 44.4 per cent in 1979) and of machinery and transport equipment (from 0.9 per cent to 12.1 per cent), with a corresponding decline in the share of food and agri-

cultural raw materials (from 45.5 per cent to 32.4 per cent and from 24.7 per cent to 10.9 per cent, respectively). This changed composition indicates that the changing structure of trade among developing countries reflected the changing structure of their exports as a whole. In fact the data in table 19 indicates that since 1960, while developing countries as a whole have been relying more on their own markets for their exports of food products, agricultural raw materials and mineral ores, similar reliance for their exports of manufactured goods has been falling (the share of mutual trade in manufactured goods their total trade having fallen from 42.7 per cent in 1960 to 35 per cent in 1979). This suggests a movement towards a more balanced pattern of interdependence, with developing countries now trading more among themselves in their traditional food and raw materials exports on which they have been so dependent on markets in the developed countries, while emerging as competitive exporters of manufactures to developed countries, with less reliance on regionally protected markets in other developing countries for such exports.

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#### TABLE 19

#### Share of intra-trade in total exports of developing countries, by major commodity groups

Commodity	In billions		In per cent					
group (SITC)	of US <b>S</b> 1979 ¤	1960	1965	1970	1975	1979		
Food					}			
(0+1+22+4)	57.9	18.2	17.4	15.4	22.8	27.0		
Agricultural raw materials								
(2-22-27-28)	19.5	17.4	14.8	21.5	26.3	27.6		
Minerals and ores								
$(27+28)\ldots\ldots\ldots$	9.5	3.7	5.6	6.4	8.1	12.0		
Fuels								
(3)	235.7	29.7	23.6	21.1	20.8	20.6		
Iron and steel				1		9		
(67)	4.2	40.9	64.4	47.0	51.5	52.4		
Non-ferrous metals								
(68)	8.2	6.0	6.2	6.3	17.0	21.0		
Manufactured goods								
(5  to  8  less  67 + 68).	79.3	42.7	38.0	34.5	36.3	35.0		
All commodities								
(0-9)	416.6	22.3	20.9	20.3	23.3	24.7		

Source. United Nations, Monthly Bulletin of Statistics, July 1981, and UNCTAD secretariat estimates.

<sup>a</sup> For reference only. Data refers to the value of trade among developing countries.

In interpreting these developments, however, it has to be borne in mind that the bulk of the expansion of exports of manufactures from developing countries is accounted for by only a handful of countries, and that the large majority of developing countries have not shared to any significant extent in this expansion. Consequently, the pattern presented by these overall figures, especially in regard to trade in manufactures, the most dynamic growth sector both for trade among developing countries and for developing countries' total exports, is not necessarily representative of the situation and experience of many, or perhaps most, individual developing countries.

Moreover, there has been growing recognition among developing countries that while trade among developing countries and its product diversification may continue to expand in response to market prices, for the realization of the full potential for this expansion-conscious policies and actions, including establishment of institutions, mechanisms and arrangements for promoting trade and economic collaboration among developing countries, are of vital significance. This is because a number of factors - some of the most important of which are historical ties, flows of market information, transport links, and the role of transnational corporations of developed countries in international trade - tend to favour vertical trade links between developed and developing countries and thus act as barriers to the growth of trade among developing countries. Consequently, over the last two decades developing countries have taken initiatives which are aimed at providing a framework for an institutional and structural change conducive to the expansion of trade among themselves. While in the early stages these initiatives focused on the establishment of subregional and regional integration schemes, more recently a more ambitious approach has been agreed upon, stemming from the initiatives of the Mexico City Conference, which called for the establishment of a Global System of Trade Preferences among developing countries (GSTP). On the basis of technical studies carried out by the UNCTAD secretariat. the Arusha Ministerial Meeting of the Group of 77 endorsed certain guidelines for the negotiation of a GSTP and set in motion a process for its negotiation.

#### 2. Monetary and financial co-operation

During the 1970s monetary and financial cooperation has emerged as a very important instrument for strenghtening economic co-operation among developing countries and their collective self-reliance. Developing countries have adopted a number of measures over the past decade in the area of money and finance to facilitate economic cooperation among themselves. These include the formation of regional and subregional payments arrangements in the form of clearing houses, payments unions and reserve centres (often within the context of trade integration schemes), and the establishment of multinational development finance institutions and national development funds for external assistance. The possiblity of broadening the regional and subregional clearing arrangements among developing countries into a scheme for the developing countries as a whole has also been suggested as an important initiative in support of their mutual trade. In addition, consideration may be given to instituting a global system of clearing arrangements among developing countries.

In the field of development finance, co-operative efforts of developing countries during the 1950s and 1960s were reflected in the establishment of the regional development banks in Latin America, Africa and Asia, as well as in the formation of subregional development banks, for example, in East Africa and in the Caribbean. In the decade of the 1970s, however, financial co-operation among developing countries has taken on new dimensions, with the establishment of a large number of development funds, either individually or collectively, by capital surplus developing countries, essentially members of OPEC, for increasing resource flows to developing countries in need of development finance. Net financial flows (i.e. disbursements less repayments) from OPEC member countries to developing countries totalled \$5.2 billion in 1979, about 60 per cent of these flows being on concessional terms. An important feature of OPEC financial assistance to the developing countries is the untied nature of this aid, including a large share of general support assistance not tied to specific projects. Moreover, financial flows on concessional terms in 1979 from OPEC member countries to other developing countries, as a proportion of their combined GNP, were far greater than the corresponding flows from developed market-economy countries, being 1.44 per cent of GNP, compared with ODA transfers from DAC members countries of 0.32 per cent of GNP (see table 20).

#### TABLE 20

Comparative ODA performance of major donor groups

	ODA (millions of US dollars)				
	1975	1978	1979		
DAC <sup>a</sup>	13022	18794	20876		
OPEC	5517	4338	5197		
СМЕА <sup>ь</sup>	1437 266	1266 224	1852 560		
	ODA	as percentage of	GNP		
	1975	1978	1979		
DAC <sup>a</sup>	0.34	0.33	0.32		
OPEC	2.94	1.38	1.44		
СМЕА <sup>ь</sup>	0.13 0.02	0.09 0.02	0.11 0.03		
-	Perc	entage of total O	DA		
	1975	1978	1979		
DAC <sup>a</sup>	65	77	75		
OPEC	27	18	18		
СМЕА <sup>ь</sup>	8	5	7		

Source: OECD, Development Co-operation 1980 Review, Paris, 1980.

<sup>a</sup> Refers to the members of the Development Assistance Committee of the OECD. <sup>b</sup> The first row includes aid to Cuba, Democratic People's Republic of Korea and Viet Nam. The second row excludes aid to those three countries.

Another significant feature of policies relating to resource transfers from members of OPEC to other developing countries is the emphasis on joint ventures <sup>37</sup> in agricultural and industrial projects located

<sup>&</sup>lt;sup>37</sup>Perhaps the most important example of such co-operation is the ten-year proposal for the development of the vast agricultural potential of the Sudan, with the assistance of the Arab Authority for Agricultural Investment and Development (an organization having 12 Arab governments or members) to help meet the food deficits of the Arab countries.

in the capital-importing countries and serving the mutual interests of the parties involved. This approach opens up vast possibilities for combining the capital resources of capital surplus developing countries with the land, human and other resources of other developing countries in a joint and cooperative effort to meet their individual development needs within the framework of collective selfreliance. Some developing countries have the capacity to produce food surpluses but lack the necessary capital. There are therefore important opportunities for ECDC, in the realm of food security, for food-deficit, capital surplus developing countries. Joint investment projects for the development of mineral and raw materials resources of developing countries, including in particular projects for their processing, also offer important opportunities for exploiting the link between the needs of capital surplus and other developing countries.

#### 3. Human capital and the mobility of labour

Another noteworthy feature of ECDC during the 1970s is in the area of increased mobility of labour. As a result of the expanding development and industrialization programmes undertaken by OPEC member countries, there was a sharp increase in the demand for skilled and unskilled labour in these countries. Thus, there was an increased movement of labour from the developing countries of North Africa and South Asia to the OPEC countries, especially those of the Persian Gulf region. Although this migratory flow cannot yet be fully documented, there is no doubt that it has been of critical importance both to the recipient and to the supplying countries. The remittances of workers to their home countries have become an increasingly important source of foreign exchange to many developing countries. It is estimated that in 1979 such remittances amounted to \$10 billion.<sup>38</sup> Equally, these labour inputs have contributed to the maintenance of the tempo of development in the recipient countries.

In spite of the current international economic crisis and its attendant disturbed conditions, the developing countries have been able to pursue economic co-operation among themselves. The growth and evolving pattern of their trade has bolstered their confidence in collective self-reliance and cushioned them from the impact of frustration and disappointment arising from failure to make any real progress in recent international economic negotiations. There have also been a number of encouraging developments favouring ECDC. These developments confirm that there is a perceived readiness on the part of the developing countries to deepen and broaden exchanges among themselves, not only in the political arena, but also in the economic and technical fields.

<sup>&</sup>lt;sup>38</sup>Annex table A.9 gives data on unrequited transfers in 1970–1979 for selected developing countries. These transfers consist mainly of remittances.

#### **CHINA**

Unlike most developing countries, China has followed a road of development, based on central planning and national self-reliance.

The rapid pace of economic development in China was accompanied by large structural shifts between sectors. Manufacturing and, in particular, heavy industry has been given high priority. As is often the case during periods of rapid growth, sectoral imbalances arose which created serious problems of adjustment. The balance between agricultural and industrial production was especially delicate. Sustained harvest failures led to major policy changes in the period following the Great Leap Forward (1958–1960). Since then, there has been a shift in the relative importance attached to agriculture, although the growth of heavy industry has continued to outpace all other sectors.

Another noteworthy feature has been China's ability to attain relatively high growth rates while at the same time succeeding in eradicating absolute poverty and in cutting off the extreme "tails" of income distribution,<sup>39</sup> a major accomplishment which is in contrast to the growth experience of most other developing countries.

This chapter provides a brief review of the transformation which has taken place in China during the post-war period and identifies the major policy shifts that have taken place; it also includes an examination of the evolution of China's foreign trade and its relationship to economic development.

#### A. Structural transformation and development

#### 1. 1949-1952: Reconstruction and reform

When the Communist Party of China came into power in October 1949, it was faced with the enormous task of economic reconstruction and development. The task of material development was accompanied by the drive to restructure the society on a new political, cultural and economic basis. The system of the Soviet Union was adopted as a basis for China's economic development, although the differences in the economic background and conditions between the two countries were substantial.<sup>40</sup> During this period a nationwide land reform was undertaken together with steps to provide for the takeover of certain industrial enterprises by the State. By the end of the period, China was able to surpass the pre-war peak levels in both industrial and agricultural production.

#### 2. 1953-1957: The transition to socialism

The period 1953–1957 corresponded to that of the First Five-Year Plan. The Plan consisted of various interlocking objectives, stressing national power, economic independence and a reform of the capitalistic structure of the country. It emphasized the development of the industrial sector in general and producer goods in particular. Relatively little attention was given to agriculture.<sup>41</sup>

In terms of the objectives of the First Five-Year Plan, plan fulfilment was outstanding. Through sustained investment in heavy industry, and by concentrating on large plants equipped with modern technology, the Chinese economy was ushered into the stage of industrialization.

Between 1953 and 1957, national income (net material product) in real terms increased at an average annual rate of 9 per cent. During the same period, the rates of growth of agriculture and industry were 4.8 per cent and 19.6 per cent respectively (see chart 12 and annex table A.18). The average annual rate of increase of iron and steel output during the plan quinquennium was over 30 per cent. As a result, the contribution of industry to national income increased from 18 per cent to 26 per cent, largely at the expense of agriculture (nearly 50 per cent in 1952 and less than 40 per cent in 1957).

While its role as a consumer of resources was minimized, agriculture had the crucial task of providing the bulk of the resources needed for industrialization: food for consumption, raw materials for light industry, and exports to finance imports of capital equipment. This asymmetrical treatment of agriculture was based on the expectation that this sector could generate and sustain its own growth primarily through reorganization. Indeed, agriculture experienced a process of rapid collectivization<sup>42</sup> during this

<sup>&</sup>lt;sup>39</sup>Nevertheless, there still remain substantial income differentials among various groups.

<sup>&</sup>lt;sup>40</sup>On the eve of its First Five-Year Plan (1928–1932), the Soviet Union had already developed a significant industrial base, and agricultural productivity, although low, was at least sufficient to sustain an industrialization programme. The Chinese economy, on the other hand, was preponderantly agricultural in nature, over-populated and relatively backward in technology.

<sup>&</sup>lt;sup>41</sup>According to the Plan, only 8 per cent of State capital investment was to be allocated to agriculture, as compared to 59 per cent for industry and 19 per cent for transport and communications.

<sup>&</sup>lt;sup>42</sup>The speed of collectivization far exceeded the expectations of the Chinese leaders. In 1953, the original official target date for achieving complete socialization was 1967. In 1955, it was advanced to 1960 and subsequently to 1958.



period. It started with the transformation of individual farming to mutual aid teams in 1953–1955, which was followed by an upsurge in the formation of "lower" co-operatives in 1956–1957. By the end of 1957 collectivization was practically completed, with about 97 per cent of the peasant households having been organized into co-operatives.

The decision to accelerate collectivization in 1955 was prompted by several problems that had emerged after the land reform. Of particular concern to the authorities was the reappearance of income disparities among peasants and inadequate local organization to carry out public works and acquire agricultural machinery.

In the industrial sector investments were directed to the construction of large State-owned plants. At the same time, private ownership of existing enterprises was converted to socialist forms, an operation which was practically completed by 1957.

#### 3. 1958–1960: The Great Leap Forward

In 1958, the authorities launched the Great Leap Forward.<sup>43</sup> This called for a sharp upsurge in output at a rate substantially higher than in the first plan quinquennium, through the parallel development of agriculture and industry; large and small plants were to expand production by using modern and indigenous methods of production respectively. The expansion of agricultural output was to be aided by the programme of establishing agricultural communes throughout the countryside. These measures formed the essence of the policy known as "walking on two legs".<sup>44</sup>

In addition to the planned expansion of largescale industry, the policy of "walking on two legs" contained the objective of establishing an additional industrial front consisting of numerous small production units employing labour-intensive methods. On the agricultural side, 1958-1959 saw the rapid transformation of co-operatives into even larger units called "people's communes". The dramatic changes in rural organization, however, failed to fulfil the ambitious targets set for agriculture. Bad weather, which resulted in a poor harvest in 1959, prevailed again in 1960, and accentuated the food shortage which had developed in the previous year. The difficulties were compounded by the abrupt and complete withdrawal of all Soviet technicians in mid-1960.

#### 4. 1961–1965: Readjustment and consolidation

The failure of the Great Leap Forward led to a new economic policy of "readjustment, consolidation, filling-out and raising standards". Apart from a concern with the quality of output, it called for a reversal of the sectoral priorities adopted in 1953-1957 and implicit in the Great Leap Forward. The basic development theme became "agriculture as the foundation and industry as the leading factor". The most important task of all other sectors, including industry, trade and transportation, was the support of agriculture. Despite the shift of emphasis towards agriculture, the harvest failed for the third successive year in 1961, due to bad weather, resulting in the import of food grains on a large scale for the first time since 1949. To restore and increase agricultural production, successive steps of decentralization were undertaken. The production teams became more or less independent operating units.

During this period, the chemical industry became one of China's fastest-growing industrial sectors because of the high priority assigned to agricultural chemicals, especially chemical fertilizers, pesticides and insecticides. The efforts to mechanize agriculture were supported by a rapid expansion of the production of agricultural machinery. In addition, synthetics were introduced as raw materials to reduce industry's dependence on the vagaries of agricultural production, on the one hand, and to release agricultural resources for the provision of foodstuffs, on the other. The extractive industries were also singled out for expansion and registered impressive gains in output. Special emphasis was placed on the expansion of the petroleum industry. Available estimates show that production of crude oil grew at an average annual rate of about 13 per cent during 1961-1965.

# 5. 1966–1976: The Cultural Revolution and its aftermath

The trend of economic recovery was interrupted when the nature of the socialist education movement, which was initiated late in 1962, was transformed in mid-1966 into the Great Proletarian Cultural Revolution. The Revolution swept across the country and led to widespread dislocations in transportation and production. Industrial production declined sharply, by 13.9 per cent in 1967 and 9.7 per cent in 1968. Internal order was not restored until 1969 by the People's Liberation Army, and was followed by a period of reconstruction lasting until 1976.<sup>45</sup>

There is no information that can be used to evaluate the impact of these events on the production system, or the speed of the recovery following the restoration of order. The basic policy of "agriculture as the foundation and industry as the leading factor" appeared to have remained unchanged. However, priorities for the extractive industries were raised and emphasis placed on lowering production costs and elevating the level of self-sufficiency. Between 1966 and 1977 the level of industrial production just about doubled.

<sup>&</sup>lt;sup>43</sup>This period is sometimes referred to as the Second Five-Year Plan. It was short-lived because of harvest failures in 1959 and 1960, among other reasons.

<sup>&</sup>lt;sup>44</sup>Such policies constitute a distinct departure from Soviet practice, for they have no counterpart in Soviet planning. In the case of the iron and steel industry, the policy led to the construction of "backyard furnaces" on a nationwide basis.

<sup>&</sup>lt;sup>45</sup>A Fourth Five-Year Plan (1971-1975) was announced in 1971. However, as in the case of the Third Five-Year Plan (1966-1970), not much is known of its contents.

#### 6. 1977 onwards: Modernization and adjustment

With the resumption of overall planning, the programme of "four modernizations of agriculture, industry, science and technology, and national defence", first announced in 1964 was reinstated. In an apparent effort to make up for the setback suffered by the economy during the period of the Cultural Revolution, ambitious production targets were formulated. As part of the expansionary process, real national income rose by 8.3 per cent in 1977 and 12.0 per cent in 1978, while industrial output registered increases of 14.3 per cent and 13.5 per cent respectively. Agricultural production stagnated in 1977 but grew by 8.9 per cent in 1978.

By the end of 1978, however, inter-sectoral imbalances emerged once again. Foodstuffs (other than grain) were in short supply, as were various consumer goods. More acute were shortages in energy, power, building materials and certain key raw materials for industry. Growth in agriculture in particular continued to lag behind development in the industrial sector. Accordingly, in mid-1979, a revised three-year transitional development programme was introduced under the heading, "readjustment, restructuring, consolidation and improvement", with the objective of increasing productive capacities in agriculture, industrial consumer goods and in export branches through an adjustment of financial and investment policies.<sup>46</sup>

As a result, for the first time since the inauguration of central planning, growth in heavy industry in 1979 lagged behind that of light industry. On the agricultural front, grain output reached a record level in 1979 but declined slightly in 1980 due to poor weather conditions. There were, however, impressive increases in 1980 in the production of other food crops, as well as of cash crops such as cotton and oilseeds.

While there is no denying the remarkable achievements of China in its development efforts, economic growth has taken place mostly in spurts and subject to disruptions brought about by non-economic factors. The Chinese planners are evidently still experimenting with alternative policies, including those for promoting efficiency in production management, which would eliminate the need for stop-go measures and enable the economy to achieve a more steady and balanced growth within the framework of overall planning.

#### **B.** External trade and economic relations

China has always stressed the importance of selfreliance. Moreover, the country is so large that external trade<sup>47</sup> is expected to continue to be comparatively unimportant in relation to domestic product. In 1977 total trade as a proportion of aggregate value of agricultural and industrial output was only 5 per cent. Data on China's trade are shown in annex table A.19.

The Chinese authorities viewed international trade less as a means of equilibrating sectoral material imbalances than as a means of acquiring new technology embodied in imported goods. Thus China, in its industrialization programme, has placed a particular emphasis on "acquiring" foreign technology in the form of large-scale imports of machinery and equipment.

The external trade of China reflects, by and large, the overall development trend of the economy. Following the restoration of order in the country late in 1949, the total value of trade increased rapidly between 1950 and 1959, when it reached a peak level more than 3.5 times that of 1950.

With the collapse of the Leap Forward in 1960, total trade fell persistently until 1962 when it amounted to only 62 per cent of the 1959 level. The subsequent resumption of its growth was interrupted, however, by the Cultural Revolution and the 1959 peak level of total trade was not recovered until 1970. Since then total trade has expanded rapidly. Its upsurge in the 1970s was the outcome of a combination of factors, including a softening in 1972 of China's policy stand on external economic relations, the export of oil in substantial quantities and the rehabilitation in 1977 of the modernization programme.

Imports, and especially imports of complete plants, have given a major impetus to China's industrialization. However, its import capability depends upon the availability of exportable goods and this in turn is determined by agricultural performance.

The availability of credits from the USSR was responsible for the fact that imports expanded more rapidly than exports up to 1954. China was thus able to increase its import capability in a critical period when limited export surpluses could have slowed down the tempo of economic development. During 1954–1964, China's exports grew substantially faster than imports, and the surplus was used to finance reverse flows of capital in amortization of its debt to the Soviet Union.

China avoided borrowing from the developed market economy countries until 1960,<sup>48</sup> and did not contract any loans during 1966–1972. However, in 1973, it started once again to accept credits from

<sup>&</sup>lt;sup>46</sup>Besides lowering the scale of capital construction, announced in 1977, there was an overall reduction in the production levels set for heavy industry, including a 6 per cent cut in those of steel, oil and coal.

<sup>&</sup>lt;sup>47</sup>There are various difficulties in using official trade statistics of China for the few years for which they are available. Data on China's trade are, as a rule, derived from official trade statistics

published by its trading partners and international agencies. This situation, however, poses problems of measurement, including the question of errors and omissions and the conversion from an f.o.b. to a c.i.f. basis and vice versa. Thus the estimates presented in annex table A.19 may be subject to wide margins of error.

<sup>&</sup>lt;sup>48</sup>In 1960, China began to receive commercial loans from Western countries in the form of short- and medium-term credits, varying from 6 to 18 months, for purchases of grains and fertilizers, and up to five years for imports of machinery and equipment. The major credit suppliers were Australia, Canada, the Federal Republic of Germany, France, Italy, Japan, the Netherlands and the United Kingdom.

developed market economy countries to finance imports. China is still cautious about borrowing from abroad on a large scale. It has recently completed negotiations for loans of \$0.9 billion from the IMF and for \$200 million from the World Bank.

#### 1. The structure of trade

With the industrialization of the economy, the structure of China's trade has undergone substantial changes. In terms of exports, agricultural products as a group were rapidly superceded in relative importance by light industrial products, including textiles, in the 1950s. The process continued into the 1960s but at a much slower pace. Heavy industrial products, including oil, coal and machinery, started to gain importance during the 1970s, and together accounted for 39 per cent of China's total exports in 1980.

China is now becoming an important supplier of a large number of strategic metals,<sup>49</sup> including vanadium, germanium, titanium, molybdenum, strontium, cadmium, tungsten and chromium. These and other exportable metals are essential to high-technology industries such as defence, aerospace and advanced electronics.

China's imports consist primarily of capital goods, especially machinery and equipment.<sup>50</sup> The only time the importance of capital goods has been overshadowed was in 1961, when there was an urgent need to import food grains on a large scale. Within the machinery group, imports of complete plants increased rapidly in keeping with the pace of China's industrialization. China's emphasis on technology in its economic development remains evident in that complete plants, which in the final analysis constitute the most thorough form of technology imports, accounted for as much as 12.9 per cent of total imports in 1980.

#### 2. Changes in the direction of trade

Data on the direction of China's trade are presented in annex table A.20. Two major changes are worth noting, both of which can be attributed to China's development needs together with changes in its foreign relations. The first trade reorientation, in favour of the socialist countries of Eastern Europe was effected during 1950–1952 when the share of all other countries in China's total trade fell from 62 per cent to 40 per cent. The prominence of the socialist countries in the 1950s can be attributed partly to China's policy of "leaning to one side", and partly to the embargo by the United States on its trade following the outbreak of hostilities in Korea in 1950.

The second reorientation took place in 1960 as a result of disturbed Sino-Soviet relations. Many of the imports China needed were either not readily available from the socialist countries (for example, grain) or could be purchased on competitive terms from other countries. Thus, the period from 1960 onwards witnessed a complete reversal of the earlier trend, with developed market-economy countries becoming its major trading partners.

In the 1950s, China's trade was primarily with the Soviet Union. In the 1960s, the socialist countries of Eastern Europe ceded their place progressively to the developed market economy countries and, to some extent, to developing countries. In the 1970s, China's trade became more diversified as trade with developing countries expanded. Nevertheless, the bulk of imports continued to come from developed market-economy countries. China's trade with developed market-economy countries is dominated by Japan, in both exports and imports. Noteworthy, however, is the increasing importance of the United States as a source of imports following the lifting of that country's embargo on China in April 1971.

Among China's trading partners, Hong Kong occupies a unique position; it constitutes China's largest single source of export revenue. China has consistently maintained a large surplus in its trade with Hong Kong, largely because the latter is heavily dependent on China for supplies of foodstuffs. At the same time, China, with its own bank in Hong Kong, has been able, in its trade with other countries, to take advantage of the financial and port facilities which Hong Kong provides.

China's potential for economic growth is generally recognized. The underlying theme of self-reliance still remains, but China has relaxed its policy on external economic relations and promulgated the Joint Venture Law and Regulations, etc. to encourage foreign investment. China is still cautious about external borrowing, but has begun to accept arrangements for deferred payments or short-term financing for imports as well as long-term official loans carrying low interest rates from various countries and international agencies.

<sup>&</sup>lt;sup>49</sup>China has known commercial deposits of all but 10 of the world's 140 minerals and is a major producer of 17 of them, including tungsten, titanium and molybdenum.

<sup>&</sup>lt;sup>50</sup>The share of capital goods in China's imports was sharply raised from the pre-1949 level of 40 per cent to an average of over 90 per cent during 1950-1958. Similarly, during 1950-1960, the share of machinery and equipment in China's imports from the Soviet Union expanded from 10.6 per cent to 61.7 per cent.

#### Chapter 5

#### THE SOCIALIST COUNTRIES OF EASTERN EUROPE

The socialist countries of Eastern Europe have taken a development path that is distinctly different from those of developed market-economy or developing countries. The distinctive feature of the economic mechanism of the socialist countries of Eastern Europe is central planning with emphasis on industry. In the post-war period as a whole, the economic growth of the region has been rapid indeed, and the growth of industry has been particularly impressive. Between 1950 and 1979 the national income of the Council for Mutual Economic Assistance (CMEA) member countries<sup>51</sup> grew 7.8 times, and gross industrial output 12.4 times (the corresponding world totals were 4.1 and 6.1).

The fast tempo of industrial expansion has brought with it increasing complexities in planning. It has also made the achievement of material balances a delicate and difficult task. Underlying the material-balance approach to planning is the assumption that various technical coefficients will remain constant. As the economy grows, its existing pattern is maintained until the need for change has been demonstrated. Thus, changes in planning priorities play an important role in the growth process.

As the industrial base of the economies has become more sophisticated, new problems have arisen that require different methods of planning and management. Over the years, the countries have adopted various programmes of economic reforms. These economic reforms have, on the whole, resulted in an overall improvement in the system of economic management.

The achievements of the socialist countries of Eastern Europe are especially impressive with regard to basic industries, notably engineering, metallurgy, electric power generation and chemicals. For example, the share of engineering in the overall volume of the industrial output of the CMEA member countries went up to 26.4 per cent in 1980 compared with 22.9 per cent in 1975 (in 1980 prices). Metallurgical production increased by 8 per cent per year in 1975–1980 and electric power generation went up by 4.6 per cent annually. The stress on the need to expand the industrial base of the economies at a rapid pace has resulted in gains in the growth of consumer goods industries which are relatively modest, especially with respect to high-quality products. Similarly, in spite of substantial improvements over the years, agriculture has not fully met the rap-

<sup>51</sup>As the countries members of CMEA from other regions (Cuba, Mongolia and Viet Nam) occupy a small share in the total economic potential of the CMEA, these figures can be fully attributed to the socialist countries of Eastern Europe.

idly increasing demand for food products, making large imports of grain necessary in times of harvest shortfalls.

Economic growth in the 1970s slackened in comparison with the previous two decades. As to the five-year period covering 1976-1980, the socialist countries of Eastern Europe attained an annual average growth of 4.1 per cent in national income and of 4.7 per cent in industrial output as against 6.3 per cent and 8.1 per cent respectively during the previous five-year period (1971-1975). Nevertheless, the rates of growth of the socialist countries of Eastern Europe in recent years were equal to or higher than those for the world as a whole and higher than in the developed market-economy countries, and only in 1979, when the socialist countries of Eastern Europe registered the lowest growth performance in the post-war period (2.5 per cent) was this figure lower than the world average growth rate of 3.4 per cent.

The present economic policies of the socialist countries of Eastern Europe are designed to increase the overall effectiveness of their economies, putting major emphasis on qualitative changes in production. To enhance the development of their national economies, the socialist countries of Eastern Europe have stressed the importance of mutual co-operation, within the framework of the Council for Mutual Economic Assistance (CMEA).<sup>52</sup> CMEA is responsible for promoting co-operation and economic integration by uniting and co-ordinating the efforts of the member countries so as to accelerate technological progress, industrialization and labour productivity.

#### A. Overall economic development

The development strategy of priority investment in industry was extensively applied with remarkable success by the socialist countries of Eastern Europe in the past three decades, producing a rapid growth of the net material product (NMP) which rose at an average annual rate of 7.2 per cent (see table 21). Growth was particularly rapid up to the late 1960s, when supplies of labour and raw materials were abundant. Since then, its tempo has slackened as the possibilities for extensive growth have became more limited. This was due, among other factors, to the

<sup>&</sup>lt;sup>52</sup>The Council was established in 1949 and now consists of Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania and the USSR as well as the non-European countries of Cuba, Mongolia, and Viet Nam.

					1976-1	980
Sector/Country	1956-60	1961-65	1966-70	1971-75	Targes	Actual level
Net material product	9.1	6.2	7.2	6.2	5.3	4.2
Bulgaria	9.5	7.0	8.1	7.8	7.7	6.2
Czechoslovakia	7.5	1.2	6.6	5.7	4.9	3.7
German Dem. Rep	7.7ª	2.6	5.6	5.4	5.0	4.1
Hungary	5.8	4.5	6.5	6.2	5.4-5.7	3.2
Poland	6.6	6.0	5.7	9.8	7.0-7.3	1.6
Romania	10.8	8.9	7.2	11.3	10.0-11.0	7.1
USSR	8.7	6.4	7.6	5.7	4.7	4.4
Industry		8.2	9.3	8.3		4.7
Bulgaria	15.9	11.7	11.2	8.9	9.2	6.0
Czechoslovakia	10.5	5.2	6.3	6.7	5.7-6.0	4.6
German Dem. Rep	9.2	5.9	6.4	6.3	6.0	4.9
Hungary	7.5	8.1	6.1	6.5	6.0	3.4
Poland	9.9	8.6	8.3	10.6	8.2-8.5	4.5
Romania	19.9	13.0	11.8	13.2	10.2-11.2	9.5
USSR	10.4	8.6	8.5	7.4	6.3	4.5
Agriculture						
Bulgaria	28.3 a	2.9	-4.5	2.2	3.7	2.1
Czechoslovakia	-1.7	-4.2	4.1	2.9	2.7	1.7
German Dem. Rep	9.2ª	1.8	-0.4	2.1	3.0 <sup>b</sup>	1.3
Hungary	2.7 ª	0.7	-0.5	3.4	3.2-3.4	2.9
Poland	4.0ª	1.1	- 3.6	3.1	3.0-3.5	0.6
Romania	12.2	- 0.1	- 4.0	4.6	5.1-7.6	4.8
USSR		1.2	- 0.6	2.5	3.0	1.7
Investment						
Bulgaria	14.9ª	12.4	13.1	8.6	4.7	4.5
Czechoslovakia	13.6	1.1	6.4	8.2	5.4	4.1
German Dem. Rep	11.7 a	3.4	13.0	4.4	4.2	5.7
Hungary <sup>c</sup>		7.2	16.2	7.0	2.1	4.2 <sup>b</sup>
Poland	10.7	7.9	8.6	18.4	0.2 <sup>b</sup>	0.5 <sup>b</sup>
Romania	12.6			11.4	12.8	9.8
USSR	12.5			6.9	3.3	3.9

## TABLE 21 Sectoral growth in the socialist countries of Eastern Europe, 1956-1980 (Average annual percentage change)

Source: National statistics, CMEA statistical yearbooks, national plans and plan fulfilment reports and ECE, Economic Survey of Europe in 1980, United Nations publication, Sales No. E.81.II.E.1.

<sup>a</sup> Current prices. <sup>b</sup> ECE estimate.

<sup>c</sup> Socialist sector only.

high cost of investment in fuel and raw material projects. For many years, the Soviet Union had been the main supplier of raw materials as well as crude oil, gas and, together with Poland, of coal to other European countries members of CMEA. However, its proven reserves were running low and it had become necessary to develop new fields.

In the late 1970s in the light of experience gained in the implementation of previous plans, development priorities were redefined with the basic objective of restoring both internal and external imbalances and growth target rates were revised downwards. In the event, these revised target rates were not entirely met, largely because of adverse weather conditions which negatively affected the crops in 1979 and 1980. The overall result was that the average annual rates of the economic growth were somewhat lower than originally planned in all the socialist countries of Eastern Europe, except Poland, where they fell considerably to 1.6 per cent (see table 21).

#### B. The pattern of sectoral development

During 1950-1980, the gross value of industry grew at an average annual rate of 8.9 per cent, as compared with the rate of 7.2 per cent for NMP mentioned above. Up to the early 1970s, the growth of industrial production was brought about by increases in both capital and labour inputs, with rising productivity. In the 1970s, however, the growth of the labour force declined, and production became more capital-intensive in order to maintain the continued expansion in industrial output. Accompanying the rise in capital intensity was an increase in the capital-output ratio.

The slowdown in industrial output became more marked in the second half of the 1970s. Nevertheless, the growth of industrial production was generally faster than that of NMP, so its share in the national output during the 1970s actually increased in most of the countries, as indicated by table 22.

#### TABLE 22

Percentage share of net industrial output in net material product of socialist countries of Eastern Europe

Country	1970	1975	1979
Bulgaria	51.1	52.1	56.6
Czechoslovakia	62.1	65.7	64.3
German Democratic Republic	57.5	59.1	61.0
Hungary	44.1	46.2	48.1
Poland	54.6	59.6	52.8
Romania	58.6	57.1	59.5
USSR	51.1	52.6	51.6

Source: See table 21.

The deceleration in industrial production expansion in recent years largely reflected the fact that the growth in overall investment was cut by more than half in comparison with the previous quinquennium. To raise the overall level of efficiency, industrial policies in the 1970s placed greater emphasis on modernizing the capital stock. Measures were also taken to increase management efficiency and to economize in the use of material inputs. Resources were also increasingly devoted to light industry and consumer goods in order to boost labour productivity.

Agricultural growth has been lower than that of industry, but nevertheless higher than the world average. Over the past three decades, it grew at an average annual rate of about 3 per cent for the region as a whole. At the national level, growth has been subject to large yearly fluctuations in both relative and absolute terms. The structural imbalance between agriculture and industry became obvious in the 1960s and led to greater mechanization and more intensive application of chemical fertilizers along with land improvement. Over the years, substantial improvements have been made, but in many areas yields remain low.

One aspect of agricultural growth relates to the need to meet the increasing demand for products of animal origin. This extended the production of crops and the raising of livestock on the basis of regional specialization. At the same time, horizontal integration of production in the form of inter-farm enterprises became more widespread and these increased in number. This development has enhanced the interdependence of agriculture and other branches of the economy, and farm policy is being increasingly formulated within the context of the national agro-technical complex.

#### C. Growth and pattern of investment

Expenditures on gross fixed capital formation account for about 30-40 per cent of NMP. In spite of shifts in the relative importance of particular sectors over the years, industry continues to receive the largest share of investment (see table 23). Within industry, emphasis has historically been on the engineering branch. The importance of engineering, whose output has generally expanded at a rate higher than that of industry as a whole, lies not only in its role as supplier of equipment and machinery for modernizing the domestic economy, but also as a major source of foreign exchange through the export of its products.

In recent years, the growth of investment lagged behind that of NMP, increasing at 4 per cent per year as compared to 8.5 per cent per year in the two previous quinquennia. The slowdown of investment growth was associated with a change in its distribution among the major sectors of the economy. For most of the countries, there was a shift in favour of production sectors, with the bulk of the increase going to industry. The share of agriculture in total investment did not change significantly. Poland, however, increased the share of its service sector, especially housing, in total investment. It also raised the share of agriculture in productive investment at the relative expense of all other major production sectors.

Within investment in the industrial sector, there were also changes in the relative priority of its constituent components. During 1975–1979, the importance of the engineering sector was further enhanced. Taken together, energy and fuel accounted for a rising proportion of industrial investment, as did the

Sector	Bulgaria	Czechoslovakia	German Dem. Rep.	Hungary	Poland	Romania	USSR
Material sphere	75.6	73.6	79.2	73.3	74.5	84.5	74.4
Agriculture & forestry	13.0	11.2	10.1	13.1	17.6	13.9	20.2
Industry	42.5	38.7	53.2	35.8	36.9	51.1	35.3
Construction	3.0	5.7	2.7	2.8	4.9	6.2	4.0
Transport & communica-		1					
tions	13.4	13.8	9.0	12.5	8.3	10.0	12.4
Other	3.7	4.2	4.2	9.1	6.8	4.1	2.5
Non-material sphere	24.4	26.4	20.8	26.7	25.5	15.5	25.6
Housing	11.3	13.1	9.3		18.8	10.4	13.3
Education	3.4	4.6			2.2	1.7	4.9
Health	1.4	2.0			2.9	0.5	
Other	8.4	6.7			1.6	2.9	

TABLE 23

Distribution of gross fixed capital formation by major sectors, in socialist countries of Eastern Europe, 1979 (Percentage share)

Source: National statistics, CMEA yearbooks, national plans and plan fulfilment reports.
chemical industry in some countries. The relative importance of all other sectors in industrial investment, including metallurgy, food and construction materials, declined in most of the countries in the region. The change in the structure of industrial investment in recent years reflects the basic policy objective of the countries in the region to reduce their dependence on oil imports and to step up their export capability so as to achieve a balance in the external sector.

## D. External trade and economic relations

The foreign trade of the socialist countries of Eastern Europe has been one of the most dynamic sectors of their economies during the whole of the post-war period. In 1950-1979 their total trade in current value increased by 34 times, while world trade augmented in the same period by 27 times. As a result of these developments the relative importance of the socialist countries of Eastern Europe in world trade appears to have increased slightly in the past three decades.<sup>53</sup> Data on the region's external trade are presented in table 24. The bulk of the external trade of the socialist countries of Eastern Europe (52 per cent in 1979) consists of their mutual

TABLE 24	Τ	: 24
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Foreign trade of the socialist countries of Eastern Europe 1960-1979 (Million US dollars)

Region	1960	<b>19</b> 70	1975	1979
Exports to (f.o.b.): Developed market-	13 187	30 895	75 730	135 976
economy countries	2 6 1 6	6 774	19 387	38 095
Developing countries Socialist countries of	1 132	4 7 5 4	12 404	23 180
Eastern Europe	8 062	18 363	42 075	70 22
Imports from (f.o.b.): Developed market-	13 390	30 177	86 632	133 502
economy countries	2 878	7 800	30 580	44 640
Developing countries Socialist countries of	1 277	3 493	11 372	17 19:
Eastern Europe	7 871	18 393	42 426	69 39:
Trade balance	- 203	+718	- 10 902	+179
economy countries	-262	-1 026	-11 193	-6 54
Developing countries	- 145	+1 261	+1032	+ 5 98

Source: National statistics of the socialist countries of Eastern Europe. Note: Import figures are c.i.f. for Hungary and Poland (1979 only).

trade. The sustained growth of these countries' intraregional trade is the result of economic integration measures taken within the framework of CMEA, including the coordination of national economic plans, the implementation of a long-term special programme of co-operation in the key sectors of the economy, the implementation of the Concerted Plan for Multilateral Integration Measures, the development of specialization and co-operation in production, and scientific and technical co-operation, etc. The intra-regional trade of the socialist countries of Eastern Europe constitutes an important component of their national plans.

Nevertheless, trade with both developed marketeconomy and developing countries has increased at the relative expense of both intra-regional flows and trade with non CMEA socialist countries, as indicated by table 25. This shift in the direction of trade reflected the need to diversify external trade and was promoted by a number of economic and institutional arrangements, including the conclusion of long-term (up to 10 or more years) trade and economic cooperation agreements and programmes.

#### TABLE 25

Growth of selected trade flows of the socialist countries of Eastern Europe, 1960-1979

	Annual average rate of grow th	Percentage distribution		
Region	1960-1979 (percentage)	1960	1979	
Exports to:				
Developed market-economy				
countries	15.1	19.8	28.1	
Developing countries	17.3	8.6	17.1	
Socialist countries of				
Eastern Europe	12.1	61.1	51.9	
Imports from:				
Developed market-economy				
countries	15.5	21.5	33.4	
Developing countries	14.7	9.5	12.9	
Socialist countries of				
Eastern Europe	12.1	58.8	52.0	

Source. National statistics of the socialist countries of Eastern Europe.

In the region's trade with developing countries, manufactured goods, including complete plants and installations, constitute some 70 per cent of its total exports. On the other hand, some 90 per cent of its imports from developing countries consist of primary products. The situation with respect to East-West trade is quite different, the bulk of the exports from the socialist countries of Eastern Europe to the West consisting of fuel and primary products, while their imports therefrom are predominantly manufactured products of various kinds, with engineering goods in the first place.

In their trade with countries outside the region, the socialist countries of Eastern Europe have accorded importance to goods originating from developing countries, and have generally accepted payment in kind in the form of imports of manufactured goods for credits granted to these countries. As a consequence, some developing countries, notably Egypt, India, Pakistan, and Yugoslavia, have managed to increase the share of manufactures in their exports to Eastern Europe to as much as 30–40 per cent or even more.

<sup>&</sup>lt;sup>53</sup>As a proportion of world trade, the share of both exports and imports of the region increased from just over 6 per cent in 1950 to about 8 per cent in 1979.

An increasing number of developing countries have entered into trade and other economic cooperation agreements with European countries members of CMEA.<sup>54</sup> Intergovernmental trade agreements now cover about 90 per cent of the trade between the two groups of countries.<sup>55</sup> In addition to trade agreements, the Soviet Union has entered into economic cooperation agreements with more than 60 developing countries, Poland and the German Democratic Republic with more than 40, and Bulgaria with about 30 developing countries.

Economic co-operation between the socialist countries of Eastern Europe and developing countries is largely concentrated in certain key industrial sectors, which vary with the needs of individual developing countries. In many cases, the projects set up through such co-operation with these countries constitute the core of their national economies. As a whole, with the technical assistance of the socialist countries of Eastern Europe 3,157 industrial enterprises and other projects have been completed and put into operation in the developing countries by 1981 and about 1,500 are under construction or are planned to be built.

The traditional bilateral form of economic cooperation has in recent years been increasingly supplemented by multilateral forms, such as tripartite co-operation, co-operation with third countries, and co-operation arrangements linking individual countries with the CMEA as a whole or with the multilateral schemes of the CMEA member countries. Another recent development is the extension of cooperation agreements up to a period of ten years or more between individual countries in the region and developed market-economy or developing countries.

At the same time, it should be noted that trade and economic co-operation between the socialist countries of Eastern Europe and developing countries, as well as within the framework of East-West relations, are faced with some important problems. Thus the bulk of the trade between socialist and developing countries is accounted for by a small number of the latter countries. Moreover, the trade between these groups of countries is relatively undiversified, following a pattern of exchanging manufactures against mainly primary commodities. With respect to East-West trade, its development has been hampered by protectionist measures on the part of some developed market-economy countries as well as by the difficulties faced by the socialist countries in meeting the quality standards and marketing requirements of the Western markets.

The congresses of ruling parties recently held in socialist countries of Eastern Europe have established the plan targets for the national economies of these countries for the period 1981-1985 and in some cases up to 1990. As in the previous period, these plans envisage much higher growth rates for foreign trade than the net material product. The highest annual average rate of growth is envisaged by the German Democratic Republic (11.2 per cent) followed by Romania (8.5-9.5 per cent), the USSR and Bulgaria (7.0 per cent in both cases) and Hungary (4.6-5.4 per cent). The new five-year economic plans of the socialist countries of Eastern Europe reflect the increasing importance placed by them on external trade as a means of achieving sustained economic growth and are indicative of their interest in intensifying their economic relations with both developed market-economy countries and developing countries.

<sup>&</sup>lt;sup>54</sup>Between 1975 and 1980, the number of developing countries that signed economic co-operation agreements with CMEA member countries increased from 64 to 86. *The CMEA member countries' co-operation in the field of foreign trade*, the CMEA secretariat (Moscow, 1980).

<sup>&</sup>lt;sup>55</sup>"Trade among countries having different economic and social systems" (TD/243 and Corr.1), reproduced in *Proceedings* of the United Nations Conference on Trade and Development, Fifth Session, vol. III, Basic documents (United Nations publication, Sales No. E.79.II.D.16).

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# Part III

# STRUCTURAL CHANGES IN SELECTED SECTORS

## **INTRODUCTION**

The reviews contained in Part II of this report were carried out mainly on the basis of regional groupings of countries but frequently concerned forces originating in international markets which often transcend national surveillance. In order to understand these forces fully it is necessary to analyze the remarkable changes which have occurred in international markets in recent years. A major feature of these changes is the growing integration of national with international markets and the increasingly dominant influence of transnational firms based mainly in developed market-economy countries.<sup>56</sup>

This growing concentration of economic power has profound implications for the international economy, especially for developing countries. Transnational corporations have become a major force in international trade in commodities, in the production and marketing of manufactured goods and minerals (including fuels), in the services sector, and in capital markets. These corporations can adversely affect the development process of the developing countries in many different ways. For example, in the commodities sector their control over marketing and distribution can depress the share in the value of output that is retained by developing countries and thus the benefits accruing to them from their natural resources and domestic production. In the manufacturing sector, by such means as transfer pricing, transnationals can have a negative impact on the tax revenues and international payments position of host developing countries. Moreover, in some developing countries their operations have probably led to competition for scarce domestic resources which has had the effect of crowding out domestic firms and entrepreneurs in both capital and product markets.

In the markets for technology the oligopolistic control of transnational corporations is especially pervasive and tends to make the technological transformation of developing countries a more difficult and unnecessarily costly process. At the same time, the growing power of the transnationals has been accompanied by rising levels of economic concentration in developed market–economy countries, which have led to increasingly rigid price behaviour in the markets for many products and have thus become a source of inflationary pressure that is difficult to handle with the traditional tools of macroeconomic management.

This part reviews selected international markets that are of special importance to developing countries. In the first chapter, general trends in the growth of transnational corporations and of their oligopolistic power is outlined. The second covers developments in the commodity markets with special attention to foodstuffs. The third chapter deals with the markets for manufactures while the fourth examines developments in the international money markets. The fifth chapter surveys developments in world shipping.

<sup>&</sup>lt;sup>56</sup>The international markets in question are not only for goods but also for factor services, such as those associated with the use of various forms of technology. There is now a growing awareness of this phenomenon and a recent analysis of the trends affecting transnational corporations is contained in *Transnational corporations in world development: a re-examination* (E/C.10/38 and Corr.1), United Nations publication, Sales No. E.78.II.A.5.

## Chapter 1

## THE INTERNATIONALIZATION OF OUTPUT AND TRADE

The growth, nature and composition of world trade has been revolutionized in the third quarter of the 20th century. At the centre of this process has been the transnational corporation (TNC) whose activities now dominate industrial, trading, banking, service and retail sectors at the global level. In one manner or another, the influence of these corporations now extends over the major proportion of world trade (excluding the socialist countries).<sup>57</sup> Moreover, approximately two-fifths of all international trade is carried out through intra-firm transfers of TNCs. These trading patterns are organically linked to recent corporate evolution in manufacturing and related service activities. They not only reflect the transition to oligopolistic structures in most major industrial sectors and the growing prevalence of control by conglomerates over wide areas of economic activity in developed market-economy countries but have also contributed to them.58

Studies have identified three major phases in the internationalization of output and trade. The first spans the years 1895-1954, which witnessed the emergence and consolidation of oligopolies in key sectors in developed market-economy countries. The second phase lasted from 1946 to the mid-1960s and witnessed the rise of the transnational corporations as a leading force in several sectors of the world economy. The third phase, covering the mid-1960s to the present, was marked by a dramatic growth of transnational conglomerates.

The impact of this internationalization of trade and output has been very unequal on different types of economies. In such a global corporate structure the role consigned to the bulk of developing countries continues overwhelmingly to be that of producers of unprocessed commodities, whose export prices and marketing are largely outside of their control.

In this context it is particularly noteworthy that over the last two decades the markets for primary commodities have undergone a shift from a situation characterized mainly by traders specializing in a single commodity (which were sometimes very large firms) to one in which the major traders are dominant in several global commodity markets.<sup>59</sup> The extent of the marketing leverage which the new situation may entail can be illustrated from the studies of the cases of four commodities which are by no means exceptional: bananas, where three conglomerates dominate 70–75 per cent of the world market; cocoa, where five corporations handle over 75 per cent; leaf tobacco, where 85–90 per cent is under the direct control of six transnational leaf buyers; and cotton, where 15 large traders exhibit similar patterns of market shares.

The market power of the multi-commodity traders stems from various aspects of their operations. Many of them are integrated backwards into plantations and forwards into processing, thereby exercising considerable control over the national marketing institutions with which they deal. Multi-commodity traders have traditionally had close links with transnational banks from which they have been able to raise much of the finance which they require. Coupled with superior economic and trading intelligence networks, this has given them a speed and flexibility in their operations unmatched by national marketing institutions. Moreover, competition at the global level among the multi-commodity traders has not excluded co-operative forms of pricing, buying and selling on occasions when this has been to their mutual advantage.

In the case of minerals and manufactured products recent tendencies have been towards an expansion of intrafirm transfers among the transnational trading affiliates of industrial transnational firms. This growth of intrafirm transactions has made for the widespread use of transfer pricing. Through this technique corporations are able to minimize their overall tax payments by manipulating the prices of intrafirm transactions, shifting profits from countries characterized by relatively high tax rates to those where rates are lower. Such corporate practices affect the trade and other international transactions not only of developing but also of developed countries.<sup>60</sup>

<sup>&</sup>lt;sup>57</sup>Significantly, TNCs also play an important role in trade between socialist countries and the rest of the world. In certain cases, they serve as trading intermediaries between individual socialist countries.

<sup>&</sup>lt;sup>58</sup>Oligopoly signifies a market structure characterized by the dominance of a small number of large firms, whose corporate and pricing policies are characterized by a recognition of their mutual interdependence, various collusive practices, and barriers against entry by other firms. A conglomerate is a corporation usually consisting of a holding company and a group of subsidiaries engaged in unrelated economic activities. This diversification confers on the conglomerate the ability to survive and even to expand certain of its product lines in periods of economic downswing by shifting profits between corporate divisions and subsidiaries.

<sup>&</sup>lt;sup>59</sup>For example, in the case of the cereal markets all major global traders market several different commodities. Thus, Cargill and Philipp Bros., which are trading firms in this area, now have global sales well over \$U\$15 billion each.

<sup>&</sup>lt;sup>60</sup>The methods of transferring funds between the constituent business entities of a transnational corporation in the interests of the group as a whole include not only the discretionary pricing of intracompany transfers of goods and services but also the manipulation of various other intracompany financial flows such as interest payments, royalties, fees for management and various technical services, dividends and loans.

In Japan, the Sogo Shosha (General Trading Company) is the most advanced form of the institutional integration of commodity and manufacturing trade in conjunction with involvement in industrial, financial and service operations. Over the last century, the Sogo Shoshas have become one of the most visible manifestations of their country's rapid growth, with a power and influence clearly transcending its frontiers. At present, there are nine giant Sogo Shoshas, whose aggregate revenues in 1979 surpassed \$US 269 billion. In the latter half of the 1970s their share of Japan's foreign trade (exports plus imports) at times reached 60 per cent. Each Sogo Shosha handles a range of 20,000–25,000 products, which gives an idea of their organizational dimension.

The process of concentration in the trading sector since 1945 has been accompanied by a similar evolution in industry. This movement has taken place not only in the developed market-economy countries but also in certain leading developing countries where the principal impetus has usually been provided by transnational corporations. Conglomeration has been an important facet of this movement. Between 1948 and 1965 there were 711 mergers of large firms in the United States, 154 of which were conglomerate. Conglomeration has also continued in more recent years, with the value of conglomerate mergers and acquisitions reaching \$1.5 billion in 1972 and soaring to \$6 billion in 1977.<sup>61</sup>

The growing internationalization of business in several sectors has been accompanied by the transition from oligopolistic structures at the national level to similar patterns at the international level. One well-known example of this is provided by the evolution of the oil industry. The increases in the price of oil during the 1970s contributed to the rapid growth of the seven major companies in the industry, whose 1980 sales exceeded \$U\$460 billion (see table 26). The share of these companies in the aggregate profits of United States manufacturing rose from 15 per cent in 1972 to 40 per cent in 1980. However, in the context of global market power it should be emphasized that the activities of these companies are not confined to oil but also straddle several other fields, such as natural resources, mining and various forms of manufacturing production.

### TABLE 26

Sales of world's major petroleum companies (Billions of US dollars)

( <b>B</b> i	llions	of US	S dolla	urs)

	1970	1980	1980 (1970 = 100)
Exxon	16.6	110.5	665
Royal Dutch Shell	10.8	<b>99.</b> 0ª	917
British Petroleum	4.1	<b>64.6</b> ª	1 575
Mobil	7.3	63.7	873
Техасо	6,3	52.5	833
Standard Oil (California)	4.2	42.9	1 021
Standard Oil (Indiana)	3.7	27.8	751
Total	53.0	461.0	870

Source Annual reports and trade sources

a Estimates

The chemical industry is another sector where there has been a marked tendency towards oligopoly at the international level. At present the 30 leading corporations, all horizontally and vertically integrated, have annual sales of well over \$200 billion. These 30 dominate the markets for most chemical end-products such as plastics, paints, fertilizers, pharmaceuticals, dyestuffs, synthetic rubber and chemical fibres. In dyestuffs, four companies are responsible for more than two-fifths of world trade, four others for another third, and one other for a tenth. In chemical fibres 12 firms produce almost three-fifths of world output and are responsible for 80 to 90 per cent of world trade. Behind the process of concentration in this industry lie several forces including the continued global recession, which has had very severe effects on the markets for several chemical products, the enormous costs of research and the development of new technology, inflation (especially the rapid rise in the prices of petrochemical feedstocks), high interest rates, and the access of the largest chemical conglomerates to the credit facilities of transnational banks. A recent forecast suggests that, as a result of this process, by the year 2000 10 of today's leading firms will have disappeared and another 10 will have merged with oil corporations.

Similar trends are also evident in some service sectors such as insurance, shipping, and banking. Some of the implications of the growing role of transnational corporations in shipping and banking are discussed below in chapters 4 and 5 of this part of the report.

<sup>&</sup>lt;sup>61</sup>United States Senate, 95th Congress, Mergers and Industrial Concentration, Hearing before the Sub-Committee on Anti-Trust and Monopoly: Acquisitions and Mergers by Conglomerates of Unrelated Business (Washington, D.C., 12 May, 27 and 28 July, and 21 September 1978), pp. 143 and 151. "Large firms" in this context are firms with assets of \$10 million or more.

## Chapter 2

## COMMODITIES

#### A. Overall developments in commodity markets

# 1. The dependence of developing countries on commodity markets

As was noted earlier, developing countries continue on the whole to be highly dependent on exports of primary commodities. Thus, the trade issues of most immediate importance are concerned with the growth and stability of commodity export prices and earnings and with the barriers to the increased processing and improved marketing of these commodities.

The falling share of commodities in world trade is a reflection of slow growth of the volume of commodity exports and declining terms of trade for commodities. The effect of these factors has been intensified in recent years. Thus, the rise in export earnings for all major groups of primary commodities decelerated substantially during the latter half of the 1970s. For several agricultural raw materials, as well as for food and beverages, there has actually been a fall in real export earnings, reflecting both falling quantities and falling real prices. Commodity prices (excluding petroleum) in real terms declined steadily throughout the period 1950-1972. After a short recovery in 1973-1974, they fluctuated sharply during the remainder of the 1970s, drifting generally downwards to a level even below the nadir of the early 1970s (see chart 13). By the end of 1980, commodity prices in real terms had reached the lowest level for the past 30 years.

Although instability is a normal feature of primary commodity prices, they experienced unusually sharp fluctuations during the 1970s. Real prices, after attaining a peak in 1973-1974, reached a trough in 1975, following a period of deep recession in the developed market-economy countries. While rising from this low in the immediately succeeding years, partly under the influence of the sharp rise in the prices of tropical beverages and some metals, they then again fell rapidly. This was the pattern of fluctuation of practically all the major commodities, but it was most pronounced, though not necessarily synchronized, for tropical beverages, sugar, vegetable oils and oilseeds and some minerals, such as copper and phosphates. For most of the major primary commodities instability rates were from twice to four times the average for the 1960s.

Over 60 per cent of developing countries' exports of food and beverages and of agricultural raw materials, as well as 80 per cent of their exports of minerals and metals, is to developed market-economy countries. The commodity trade of developing countries is therefore acutely sensitive to economic conditions in these countries. Hence, the major factors responsible for the present trends are declining and unstable growth of GNP in the latter countries, combined with high and persistent inflation.

Longer-term trends and structural change have also been exerting a significant impact on the world commodity economy and on the composition of developing countries' trade. Of particular importance is the declining share of primary commodities in world trade. Excluding fuels, the share of primary products in world trade has fallen from 38 per cent to 19 per cent in the past two decades, with the share of food in total primary products steadily rising, while that of agricultural raw materials has fallen. At the same time, the share of developing countries in world exports of non-petroleum primary commodities has fallen from 41 per cent to 29 per cent, with particularly sharp declines in their share for food and agricultural raw materials. Thus, the export structure of non-petroleum exporting developing countries seems to be dominated by commodities that are steadily declining in relative importance in world trade, and this has hampered their ability to generate export surpluses from their primary commodity sectors.

## 2. Obstacles to market access

The present situation with regard to the processing and marketing of primary commodities still disfavours developing countries, even though significant advances have been made over the years. For a wide range of commodities, particularly food products, agricultural raw materials and minerals, over 90 per cent of developing countries' exports are still in raw forms. Efforts by developing countries to process domestically their commodities have often been met by oligopolistic marketing or industrial structures which hinder entry into the international market, by industrial support and employment policies in developed countries through a widening range of protectionist measures, as well as by limited access to finance, non-competitive practices in developed market-economy countries with respect to the transfer of technology, the withholding of information and other restrictive practices.

With regard to marketing and distribution, a number of factors explain the fact that producing countries tend to receive only a very small fraction of the final consumer price for commodities. Margins at the wholesale and retail stages are often greater than the price received by the producer and sometimes fiscal charges in the developed consumer CHART 13

Commodity prices and terms of trade,a 1950-1982

(1972 = 100)



Source: UNCTAD secretariat calculations, based on UNCTAD commodity price index (1960-1980), United Nations price and unit value indices (Monthly Bulletin of Statistics) and UNCTAD spot price forecasts. \* Excluding mineral fuels.

countries represent a large share of the final price to the consumer. Among these factors emphasis should be given to the fact that developing countries have limited control over the export sales of their primary commodities, a limitation which is exacerbated by the fact that many difficulties are encountered in gaining entry into distribution channels beyond their own borders. Transnational corporations predominate in a vertically integrated process of international production, marketing and distribution for many primary commodities, a circumstance which also provides them with substantial scope for transfer pricing, thereby adversely affecting the share of export earnings accruing to the developing producing countries.

There is also extremely unequal access to market information, since transnational corporations, by virtue of the vertical integration of their activities, enjoy privileged access to this information at every stage of the marketing chain. This information problem is compounded by the present structure of commodity exchanges, in which there is little or no participation by developing countries. Likewise, interests in developed countries predominate in the ownership of primary commodity transportation facilities, with the result that developing countries forgo large potential earnings from the shipment of their primary commodities and have limited flexibility in timing shipments to improve their stocking and marketing operations.

Another limitation to market access has been the barriers to trade in agricultural and food commodities. Both tariff and non-tariff protection in several developed countries has reached extraordinarily high levels and constitutes a major constraint on increasing the export earnings of developing countries in primary commodities. Particularly in Western Europe, food commodities have been protected at overall levels frequently between 60 per cent and 100 per cent. The level of effective protection, in terms of value added by food processing, has even in many cases been multiples of 100 per cent. The structure of tariffs in most developed countries, because of tariff escalation, implies high effective protection against products based on fibres, wood and ores.<sup>62</sup> Some of the systems of agricultural protection most in use, such as variable levies, impart a significant element of instability into international trade, particularly as it affects developing countries.

Protection of domestic agriculture is therefore a matter of considerable concern to international economic policy. Several rounds of multilateral trade liberalization negotiations have taken place since the 1950s, but all these efforts have generally bypassed the agricultural and food sector. The peculiar structural problems of the agricultural sector have given rise to protectionism of a strength which it has proven difficult to deal with in the context of more general trade liberalization negotiations con-

<sup>62</sup>See the report by the UNCTAD secretariat, "The influence of protectionism on trade in primary and processed commodities: the results of the multilateral trade negotiations and areas for further international action" (TD/B/C.1/207/Add.2), 14 August 1980.

centrated on industrial products. The main reason for this is that, in the face of slow demand growth, productivity gains have required the squeezing out of production factors from agriculture in developed countries. Insufficient factor mobility has depressed income below levels acceptable by societies having as a primary objective income parity between population groups. The protection has been designed to compensate for this loss of income.

#### 3. Measures to stabilize commodity markets

The desire to stabilize prices for commodities and improve their terms of trade has in the post-war period led to a number of international efforts to establish commodity agreements for regulating the world market. Initially, they were based on a commodity-by-commodity approach, with varying success. Agreements were over time reached for only a limited number of commodities, and were insufficient to achieve an overall stability of export prices for developing countries. A new approach was launched by UNCTAD on adoption of the Integrated Programme for Commodities in 1976, a key element of which was a Common Fund for financial support to the individual commodity agreements as well as to measures of a developmental character.

The Agreement Establishing the Common Fund for Commodities was reached in June 1980. It represents a major breakthrough in the restructuring of the mechanisms governing trade relations between developed and developing countries. Not only is its creation an endorsement by the international community of the concept of market regulation on a much wider and systematic scale than before, but also a recognition of the need of structural improvements of production and commodity processing in developing countries in order to obtain higher gains from trading internationally.

difficulties in organizing international The schemes for stabilizing commodity prices evoked an interest in other stabilization measures, such as compensation for export shortfalls rather than regulating the market itself. The European Economic Community through the Lomé Convention and IMF through its various facilities have done much to bring some stability to the export earnings of developing countries or particular groupings of them and have continuously improved their schemes. The second Lomé Convention revised the terms and increased the compensation available to ACP countries and in 1979 IMF introduced a significant liberalization of conditions of access to its facility. Despite these developments, assistance has been forthcoming to finance only a small fraction of developing countries' export shortfalls and on terms which are still too restrictive.

## 4. Diversion of commodity exports to other markets

The preceding analysis has given a sombre picture of slow growing and unstable commodity markets fraught with obstacles to trade. However, there have also been a few favourable developments. Among these is the rapid expansion of developing countries themselves and, especially of the OPEC countries, as a market for primary commodities. This is also a feature, to a lesser extent, of the socialist countries' market. In all these markets import demand has been growing much faster than in developed market-economy countries, particularly for food products and minerals and metals. To the extent that income growth in these markets will continue in the 1980s to exceed that of the developed marketeconomy countries, the impact of prolonged recession in the latter could increasingly be offset. Such a redirection of the growth impulse could be more than marginally important as the 1980s unfold, since the combined share of developing countries and the socialist countries in the market for developing countries' exports of primary commodities has already reached the equivalent of 55 per cent of the developed market-economy countries' demand for food commodities, 40 per cent of that for agricultural raw materials and 28 per cent of that for minerals and metals.

## **B.** Production and trade of foodstuffs

The share of developing countries in world food production has not changed significantly in the past 20 years. With regard to cereals, which supply half or more of the calorie intake, the share of developing countries in world production has remained virtually constant at about 33 per cent. Similarly, the shares of developing countries in world consumption and imports of cereals changed only slightly (see annex table A.11). There have been, however, important changes among developing countries. Thus, a number of oil exporters and some other developing countries with relatively high per capita income and low agricultural productivity have become increasingly dependent upon imports of both cereals and other foodstuffs. On the other hand, several other developing countries, especially those which in the past imported sizeable quantities of foodstuffs through the United States PL480 aid programme, have reduced considerably their imports in the recent years.63

So far as exports of foodstuffs are concerned, the share of developing countries in world exports has over the past 20 years declined. For cereals, the decline was matched by increased export shares for Western Europe. For other foodstuffs, the declines are explained by the low income elasticity of demand for tropical food and beverages exported by developing countries.

The fact that developing countries have not increased their shares in world production and consumption of food while their population has increased faster than in the rest of the world, does not necessarily mean that their food situation has deteriorated. Indeed, over the past 20 years, average *per capita* food consumption has increased by 0.5 per

<sup>63</sup>This section has largely benefited from material put at the disposal of the UNCTAD secretariat by the FAO Project "Agriculture towards 2000". The material has been further elaborated by the secretariat and the conclusions are not necessarily those that might be drawn by the FAO Project. cent per year in these countries. None of the major groups of developing countries, not even those with low income and stagnating growth, have experienced an actual decline in *per capita* food consumption.<sup>64</sup> The situation has, however, varied from country to country. Some 20 developing countries, mainly the least developed countries, have experienced significant shortfalls in production of food because of disruptions due to war or severe droughts.

To be sure, increases in *per capita* food consumption have been accompanied by evidence of widespread malnutrition and hunger. But these problems cannot be eliminated by merely increasing food production. Indeed their causes are more directly linked to the issues of a more equitable distribution of income and land and to the development of storage facilities and other measures (including international financial measures) to ensure world food security.

#### 1. Net cereal importers

Several countries, including oil exporters, have increased per capita food consumption by something like 1.5 per cent per year.65 The production response to this higher demand was significant although insufficient, particularly for oil-exporting countries. The most important reasons were first, that for many of these countries, especially the oil-exporting ones with considerable areas of deserts, increases in food production involve expensive investment and relatively high current costs; and secondly, that expanding urban employment and incomes attracted population from the rural areas, while policies for the development of agriculture were accorded low priority; and thirdly, that international prices for foodstuffs, in particular the price of cereals, fell in real terms during the two last decades. As a result cereal imports accelerated, while the overall self-sufficiency ratio fell below 90 per cent; for cereals it was below 80 per cent.

Similarly, many developing countries have found the prevailing relationship between the prices of cereals and other agricultural products to be a disincentive to their expanding cereal production at the expense of staple exports. As a result, these countries have, over the last 20 years, a persistent deficit in cereals of more than 15 per cent, together with an overall food surplus of nearly 20 per cent. Hence, the increase in cereal imports could be seen more as the

<sup>65</sup>This discussion is based on data summarized in annex tables A.12 and A.13.

<sup>&</sup>lt;sup>64</sup>The estimates which follow are in terms of gross output and include cereals used for animal feed as well as consumption of animal products. Thus, these estimates include a certain amount of double counting. Since developed countries have been shifting their consumption patterns towards animal products, gross consumption figures tend to overestimate the actual food intake. In fact, direct human consumption of cereals in *per capita* terms has been falling over the last few decades in developed countries. If allowance is made for double counting, the gap in *per capita* food consumption growth rates of developed and developing countries narrows considerably. Thus, in terms of net human intake of calories *per capita* the annual growth was 0.1 per cent for developing countries.

response to prevailing world market conditions than as a failure of the agricultural sector. About 100 countries accounting for half of the food consumption of the developing countries have had such an experience.

## 2. Countries self-sufficient in food

About 20 developing countries are self-sufficient in food and about one-third of them have a considerable export surplus of both cereals and other foods. As this group of countries include some countries with large population like India and Pakistan, it accounts for 40 per cent of developing countries' food consumption. Over the years, for this group of countries as a whole, their self-sufficiency ratios have been generally stable. However, they have not shown any marked improvement in terms of *per capita* food consumption.

# 3. Special food problems of low-income developing countries

There remains a group of developing countries where food production has not kept up with population growth, and where other sectors of the economy have also shown poor performance. This group accounts for less than 15 per cent of food consumption of the developing world but includes more than 30 countries, half of them being least developed countries. On average, per capita cereal and food consumption have been maintained owing to increased imports or reduced exports. Production of both food and non-food items increased by less than 2 per cent per annum during the period 1961-1980. One reason for this is that real prices of cereals and other agricultural products have declined, thus depressing agricultural incomes and possibly contributing to the slow overall growth of these countries.

## 4. Global food supplies

The world's ability to grow enough food for its population has often been questioned. Each successive food crisis has been regarded as a possible indication of a more permanent problem of a Malthusian nature but once the immediate crisis was overcome, optimism returned. The 1973 food crisis, reinforced by crop failure in the USSR, happened to coincide with a period of drought in the Sub-Saharan region. Hence, the supply could not meet the world demand, and the market disequilibrium and the policies of grain surplus countries brought about a 70-per-cent increase in real grain prices. However, the price boom stimulated the output of grains and the situation was restored to the extent that real prices again fell back to the level of 1972. In recent years the increase in cereal imports into developing countries has, as already mentioned, revived the concern about food supplies but, as was stressed above, these imports were to a large extent the direct result of relative prices in world trade and did not necessarily reflect the poor performance of the agricultural sector.

Table A.13 in the annex summarizes trends in world food production in the period 1961–1980. The first striking observation is that production in developing countries has sustained its momentum for cereals and even accelerated for other crops. Indeed, there was an acceleration of food production in several groups of countries. In this connexion, it is interesting to note that the output of cereals in countries with a net agricultural surplus grew by 3.8 per cent per annum in the 1970s, despite adverse terms of trade. Moreover, food deficit countries with relatively high income *per capita* succeeded in achieving an annual rate of growth of food production of 3.7 per cent during the same period.

As regards the world output there seems to have been a fairly stable expansion of food supplies of around 2.5 per cent per year over the last two decades. Since world population growth has slown down over the last 20 years there has been a slight acceleration in *per capita* food supplies.

As was noted earlier, the big increase in food consumption *per capita* in the developed world was primarily accounted by higher consumption of animal products. 50 per cent of world production of cereals is now used for animal feed and the increment of feed grain per capita over the last 20 years is estimated to exceed 100 kgs in developed countries, which contrasts with less than 10 kgs for developing countries. About 80 per cent of the calorific content of cereals is lost during the transformation of the vegetable energy to animal calories. If the per capita consumption of animal produce had remained constant in developed countries over the last two decades, world food supplies for human consumption would have shown a higher growth rate than that observed and if the additional supplies had been used for consumption by the developing world, its per capita food consumption could have improved significantly.66

<sup>&</sup>lt;sup>66</sup>It can be estimated that a stabilization of *per capita* annual consumption in developed countries would have allowed a 0.2 percentage point higher annual growth rate in food supplies. The real price fall of cereals might have reduced growth rates by 0.1 percentage point (based on a price elasticity of 0.3, a price fall of 1 per cent per year and cereal share of total food output of one third). An increase of the annual growth of world food supplies by 0.3 percentage point would have allowed a rise of *per capita* food consumption of developing countries of 1.2 instead of 0.3 per cent per year.

## STRUCTURAL CHANGES IN MANUFACTURING OUTPUT AND TRADE

The growth of industrial output has been the main driving force behind the economic development of developing countries. Over the last 30 years industry has expanded at an accelerating rate and, as its share in total output has grown, it has played an important role in increasing the overall economic growth rate of developing countries. Whereas in 1950 the share of manufactures in the the combined GDP of developing countries was not more than 12 per cent, in 1980 it is estimated to have been around 20 per cent. However, the growth has been unequally distributed among countries, owing to both the particular international environment prevailing in the post-war period and large differences in domestic factor endowment.

# A. Pattern and growth of manufacturing output and trade in developing countries in the 1950s and 1960s

Since the second world war the location of the industrial growth centres within the developing world and the strategies of industrialization pursued by them have varied substantially. A number of Latin American countries had already reached a certain level of industrialization by the beginning of the post-war period, with manufacturing accounting for 15-30 per cent of GDP. This industrialization was largely based on policies of import substitution adopted in the face of balance-of-payments constraints and deteriorating terms of trade for their primary commodity exports.

However, during the 1950s the dynamism of industrialization shifted to South-East Asia, in the aftermath of the Korean war. Much of the impetus behind the industrialization of the countries in this region came from the export of labour-intensive goods such as clothing and other textiles, footwear, and toys. During the 1960s South-East Asia continued to be most dynamic with respect to manufacturing growth in the developing world, with a number of other countries in the region joining the pioneers of the 1950s. Rapid growth of exports also gave a boost to manufacturing in developing countries elsewhere, especially those which already had an industrial base such as Argentina, Brazil, India, Mexico, and Yugoslavia.

Behind the export performance of these developing countries lay the unprecedented growth in industrialized countries, which led to a shortage of labour and rapidly increasing labour costs in the late 1960s and the 1970s, inducing enterprises to seek means of performing the labour-intensive parts of their industrial processing in countries with relatively low labour costs, whether by subcontracting or by other means. The resulting redeployment of industrial activity to developing countries represented an extension of the intraindustry specialization which had also played an important role in accelerating trade in manufactures among developed countries in the post-war period.

Redeployment received an additional impetus from various policies adopted by governments in both developed and developing countries. For example, for imports into the United States under items USTS 806.30 and 807.00 duties could be levied only upon value added abroad in cases where imports originated in the United States.<sup>67</sup> Moreover, several developing countries provided free production zones, areas benefiting from various privileges designed to attract foreign investors wishing to take advantage of cheap labour for the purpose of export-oriented production.

The association between the expansion of manufactured exports on the one hand and rapid overall economic growth on the other eventually led many developing countries to move from policies based on import substitution to policies placing greater emphasis on export promotion.<sup>68</sup> By the end of the 1970s there were about 40 developing countries which had manufactured exports exceeding an annual total of \$100 million. Nevertheless, trade in manufactures of developing countries was still highly concentrated geographically as regards their exports. Half of the increment in their exports in the 1970s to developed market-economy countries was accounted for by only five exporters - the Republic of Korea, Hong Kong, Brazil, Mexico, and Singapore – and by four importers – the United States, the Federal Republic of Germany, the United Kingdom, and Japan. Ten countries provided 80 per cent of the total increment in exports to developed marketeconomy countries.

## B. Industrial diversification in developing countries in recent years

During the 1970s certain developing countries began to enter capital-intensive industries on a substantial scale, producing not only for the domestic but also for the export market. These countries have become increasingly competitive in sectors such as iron and steel (sheets, wires, and structures) and transport equipment (buses, trucks, cars and ships). However, their output largely consisted of standard

<sup>&</sup>lt;sup>67</sup>G.K. Helleiner, "Manufactured exports from less developed countries and multinational firms", *Economic Journal*, March 1973.

<sup>&</sup>lt;sup>68</sup>Already in the 1960s the rate of growth of developing countries' manufactured exports in terms of volume had begun to overtake that of developed market–economy countries.

products, and the technology and designs which they used were still mainly those of developed marketeconomy countries.<sup>69</sup>

Developments differed from industry to industry. For example, the low level of steel production in developing countries until recently was associated with the limited domestic demand resulting from the absence of substantial industrialization, the inadequacy of internal transport networks, and a poor endowment of coal resources.<sup>70</sup> Lack of domestic demand meant that the economies of large-scale production, characteristic of the industry, could have been exploited only if production had been primarily for export. However, production for export was inhibited by a lack of coal reserves to match the immense deposits of iron ore which exist in developing countries. Moreover, in most developing countries the transport networks were not sufficiently developed to permit use of indigenous ore supplies for steel production.

The situation gradually changed in part because of the progressive exhaustion of the richest ore deposits in the developed countries and also because of dramatic falls in shipping costs, especially in the case of iron ore. As a result of these developments, there was a shift in the geographical pattern of steel production in favour of new regions and new countries. There was also a very large rise in exports of iron ore from developing countries.

In view of the widespread adoption of policies designed to increase levels of industrialization in developing countries, it was to be expected that the opening-up of their iron-ore deposits would be accompanied by a marked rise in their share of world steel production. The high costs resulting from a small scale of operations have yet to be overcome in many of those new producing countries, and lack of access to supplies of cheap metallurgical coal often presents difficulties. With new technologies these difficulties are less daunting. For countries with deposits of natural gas a new technique, direct gas reduction of ore to steel, suitable also for smallscale operations, offers an interesting possibility. Notwithstanding these various obstacles, steel production in developing countries is expected to achieve a steady increase in its share of the world total during the 1980s.

Shipbuilding is an industry whose recent evolution in both developed and developing countries has been accompanied by the exceptionally widespread use by governments of subsidies and protective devices.<sup>71</sup> Although this complicates the task of determining the principal causes of the substantial increase in shipbuilding in developing countries, available evidence indicates that they have tended to specialise in types of production in which assembly operations play the main part. It is in assembly operations that most advantage can be taken of the low costs of skilled labour, and it is noteworthy that shipbuilding industries in developing countries typically remain heavily dependent on imports of marine equipment.

With a number of exceptions, principally in Latin America, production of motor vehicles in developing countries is also widely characterized by assembly operation, and the firms involved are usually affiliates of the major producing companies with their headquarters in developed market-economy countries.<sup>72</sup> While in shipbuilding a substantial proportion of output in developing countries is frequently exported, production of motor vehicles has so far been mainly for the home market. However, this pattern may now be beginning to change. For example, at least in some cases the major companies are beginning a process of integrating their operations on a world-wide basis for the purpose of producing standardized cars for international markets, and this is likely to have implications for vehicle manufacturing in developing countries.

Petrochemicals is another industry in which developing countries are expected to increase their share of world production substantially during the 1980s. As recently as 1976 non-OECD countries accounted for a relatively small share of world productive capacity for products such as ethylene (15 per cent), propylene (8 per cent), butadiene (5 per cent) and benzene (20 per cent).<sup>73</sup> However, many developing countries, especially major producers and exporters of the basic raw materials of petrochemical products (oil and natural gas), are now in the process of establishing industries of their own. Substantial expansion of petrochemical capacity is under way in countries such as India and the Republic of Korea in Asia, Venezuela, Mexico, and Brazil in Latin America, Nigeria in Africa, and the oil-producing countries in the Middle East.<sup>74</sup> Recent projections by UNIDO indicate that the share of developing countries in world production of basic petrochemicals and thermoplastics, which was only 9 per cent in 1979, will rise to more than 15 per cent in the mid-1980s and to as much as about 25 per cent in 1990.75

<sup>73</sup>OECD, The Petrochemical Industry. Trends in Production and Investment to 1985, (Paris, 1979), p.14.

<sup>&</sup>lt;sup>69</sup>Some idea of recent changes in the geographical distribution of the output of certain important industrial products can be obtained from annex tables A.14 and A.15, which cover steel and motor vehicles.

<sup>&</sup>lt;sup>70</sup>For a detailed account see K. Warren, *World Steel: An Economic Geography*, (Newton Abbot: David and Charles; New York: Crane, Russak and Company, 1975), and T. Rimman and R. Linden, *Shipping – How It Works*, (Gothenburg: Rinman and Linden AB, 1978), especially pp. 27–45.

<sup>&</sup>lt;sup>71</sup>For a review of the recent evolution of the shipbuilding industry in developing countries see H.P. Drewry (Shipping Consultants) Limited, *The Emergence of Third World Shipbuilding* (London, 1978).

<sup>&</sup>lt;sup>72</sup>The production of motor vehicles in developing countries is surveyed in K. Bhaskar, *The Future of the World Motor Industry* (London: Kogan Page; New York: Nichols Publishing Company, 1980), chapters 12 and 15.

<sup>&</sup>lt;sup>74</sup>On the planned expansion in petrochemical capacity in various developing countries during the 1980s see the report by the UNCTAD secretariat, *Fibres and textiles: dimensions of corporate marketing structure*, (TD/B/C.1/219), United Nations publication, Sales No. E.81.II.D.1, paras. 282–295.

<sup>&</sup>lt;sup>75</sup>UNIDO, "Second world-wide study on the petrochemical industry: process of restructuring" (ID/WG.336/3), table I.32.

# C. Flows of trade and investment among developing countries

The impetus behind industrialization in developing countries did not come only from import substitution and the growth of their exports to developed regions. In recent years their trade in manufactures among themselves has increased sharply, and has been accompanied by intra-regional flows of foreign investment. The exports which expanded fastest in this trade were in categories such as processed food, iron and steel, electrical and other machinery, radios and refrigerators, and transport equipment, for which yearly growth rates in volume of 10-30 per cent have been recorded. The most impressive performance was for engineering products, including road motor vehicles, whose share of total trade in manufactures among developing countries rose from 25 per cent in 1970 to 36 per cent in 1978.

Labour-intensive products have also been important in these trade flows. For example, intratrade in certain textiles and clothing has reached as much as 50-70 per cent of developing countries' total imports of these products.<sup>76</sup> Here the beginning of a new trend can be discerned with the rapidly growing exporters of manufactures switching from labour-intensive to capital-intensive products, which are exchanged for labour-intensive products from other developing countries. This movement was closely associated with direct investment by the former countries in the latter.

### D. The response of trade policies

The environment of trade policies within which the post-war expansion of international trade took place has been far from uniform.<sup>77</sup> The non-tariff restrictions on trade which were erected by developed market-economy countries in the pre-war period and in the aftermath of World War II were largely dismantled through actions taken within the framework of OEEC (the predecessor of OECD). Only in the case of agriculture, especially in Western Europe, have high non-tariff barriers been retained. By the end of the 1950s trade liberalization began to be extended to tariffs on manufactured goods and a series of tariff-cutting negotiations (the Geneva, Dillon, Kennedy and Tokyo Rounds) took place over a period of well over two decades. The reductions obtained in these rounds were on the whole more favourable to industrialized countries than to developing ones. Partly on these grounds developing countries requested preferential access to developed country markets, and in the early 1970s the generalized system of preferences was established in UNCTAD. At the same time various regional preferential arrangements were instituted, such as those

between the European Economic Community and the ACP states through the Lomé Convention.

> It was precisely when the new low-cost exporters succeeded in making inroads in the markets of developed market-economy countries that protectionist measures were taken by the latter. The first sector to be affected by this reaction was the textile industry. Quantitative control of trade in textile products was introduced in the framework of GATT early in the 1960s. Initially, it took the form of a Short-Term Arrangement affecting cotton textiles, which was replaced in 1962 by a Long-Term Arrangement. In 1973 that Arrangement was succeeded by an Arrangement regarding International Trade in Textiles (the so-called Multi-Fibre Arrangement), under which control was extended to textiles other than cotton.

> As exports of other manufactured goods from developing to developed countries began to increase, various types of restrictions on, and exceptions from, the arrangements for trade liberalization were introduced to cover such goods also. For example, the concept of "sensitive" products appeared in the con-text of the generalized system of preferences, and "voluntary" export restrictions exercised bv exporting countries themselves under pressure from major importing countries became common. The shift away from liberalism to more protectionist attitudes was exacerbated by the recession of the mid-1970s, as the labour shortage in developed marketeconomy countries was superseded by growing unemployment, some of it of a long-term or structural character. Despite the conclusion of the multilateral trade negotiations in 1979 (the Tokyo Round) and declarations by OECD governments calling for freer trade, quantitative restraints, including bilateral and global quotas, automatic and discriminatory licensing, minimum-price systems, seasonal restrictions, total prohibition of imports in some cases, embargoes, and so on increasingly tended to proliferate. Among new products affected by restraints on the exports of developing countries were tableware, luggage, tyres and tubes, light engineering products, electrical apparatus, iron and steel, television sets, and plywood. By the end of 1979 the developed market-economy countries maintained import restrictions of various kinds on no less than 280 manufactured goods.78

#### E. Structural adjustment in developed countries

The newly emerging pattern of trade relations between the developed and the developing world has given rise not only to the protectionist response described above but also to more constructive policy reactions based on an increasing awareness in developed market-economy countries of the need to find alternative uses for resources currently employed in branches of industry characterized by low productivity and threatened by imports. These reactions have taken several forms including policies to pro-

<sup>&</sup>lt;sup>76</sup>UNCTAD, "Statistics of trade among developing countries by country and product" (TD/B/C.7/36) pp. 8-14.

<sup>&</sup>lt;sup>77</sup>Mention was made earlier in this chapter of certain measures taken by governments in both developed and developing countries which were designed to foster exports from the latter.

<sup>&</sup>lt;sup>78</sup>"Review of developments involving restrictions of trade: Report by the UNCTAD secretariat" (TD/B/805/Supp.3), paras 22-27.

mote growth and employment in general, measures involving more specific forms of intervention, and attempts to anticipate future developments.

In the 1950s and 1960s adjustment was achieved mainly through fast growth and an efficiently functioning labour market, which enabled expanding sectors of the economy to absorb the labour and capital laid off in uncompetitive industries. However, from the mid-1970s onwards fears of inflation increasingly inhibited policies aimed at the promotion of overall growth. Indications that the demand for certain consumption goods was approaching levels of saturation made it more difficult than previously to follow employment policies based principally on transferring labour between different branches of industry. As a result, recourse was increasingly had to other solutions, such as increasing employment in the service sector, the prolongation of educational and vocational training, reductions of working hours, and earlier retirement, though none of these measures proved completely satisfactory.79

The more specific forms of intervention have included measures at a micro-economic level to redeploy the labour force, to provide funds to particular industries, or even on occasion particular firms, for the re-orientation of production, and outright compensation for losses incurred in closing down businesses. Other measures at this level have been the provision of advice and assistance in connexion with the management and research required for industrial reorganization.

However, many of the policies adopted in the 1970s to facilitate the restructuring of industry have proved very costly. Moreover, they have often been confronted with the opposition of labour and employers in declining industries. In a number of cases this opposition, backed up by lobbying and other forms of political pressure, has led to the provision of government subsidies designed to maintain levels of activity in particular industries and firms. Although it is often not easy in the depressed conditions of much of the second half of the 1970s to assess the long-term viability of enterprises in difficulty, there can be no doubt that in some cases subsidies have hindered the process of reallocating resources in more efficient or socially beneficial directions.

Efforts to anticipate future developments and thus to prevent the emergence of additional difficulties at the level of firms and industries have involved various kinds of initiative. For example, studies have been undertaken in several developed countries to analyse the factors determining changing patterns of international competitiveness. The general picture emerging from these studies was that developed countries were most likely to maintain superiority in sectors where special skills in the fields of research, product design and running complex operations were most important. By contrast, industries characterized by large inputs of less skilled labour or by capital-intensive processes for producing highly standardized products were likely to be subject to increasing competition from developing countries.<sup>80</sup>

# F. Disparities in industrial progress among developing countries

The foregoing survey of industrial progress in developing countries during the post-war period indicates how very unevenly distributed it has been. Two contributing factors merit special mention. One is the tendency for firms in developed marketeconomy countries to show marked preference for a limited number of developing countries in deciding on their foreign direct investment and their subcontracting of labour-intensive industrial processes.<sup>81</sup> Both economic and other considerations appear to explain this preference, which has meant that only a minority of developing countries has enjoyed prosperous export-led growth.

The other factor is the economies of scale which oblige many industries to be of a certain minimum size, if they are to be operated economically. This explains why only countries with large domestic markets, such as India have been able to pursue a policy of diversified industrial development based on the home market which does not require exports to play the role of a primary driving force.

Consequently, only about 25 developing countries have attained a share of 20 per cent for manufactured output in GDP. Most of them are countries in Latin America and South-East Asia, but a number of oil-exporting countries have recently made major efforts to develop their industry, which in some cases is now more important than agriculture in terms of the contribution to GDP. Nevertheless, in view of the dominance of the oil-producing sector, the share of manufacturing in the GDP remains low in these countries. Least progress in industrialization has been made in Africa, where only few countries have reached a share in GDP of 20 per cent for manufacturing and only 7 a share of 15 per cent. Nevertheless, there are 10 African countries among the more than 40 referred to above which export manufactured products of a value of at least \$100 million annually.

<sup>&</sup>lt;sup>79</sup>In some countries unemployment pay was substantially improved in order to alleviate the effects on individuals of prolonged periods without work.

<sup>&</sup>lt;sup>80</sup>It should be noted that initiatives to promote redeployment in developed market-economy countries have not only been aimed at reallocating resources in various ways in their own economies but also at promoting the transfer of certain activities to developing countries through the provision of financial and other forms of assistance at the level of the firm. For example, see UNIDO, "Structural changes in industry" (UNIDO/ICIS.136), p. 43.

<sup>&</sup>lt;sup>81</sup>For the pressures generated by competition amongst developing countries over agreements with firms in developed marketeconomy countries for industrial co-operation and the subcontracting of labour-intensive processes see F. Frobel, J. Heinrichs and O. Kreye, *The new international division of labour* (Cambridge University Press, 1980), especially chapter 5.

## Chapter 4

## INTERNATIONAL MONEY MARKETS

The growing control of transnational corporations over large areas of production and trade in recent years has been accompanied by an increase in the importance of the role played by private financial institutions in world financial and monetary affairs. Perhaps the best-known reflection of this phenomenon is the rapid growth of the Eurocurrency market, whose size in 1980 was about ten times that of a decade earlier (see table 27). The increased importance of offshore (that is to say Eurocurrency) markets in relation to domestically held international liquidity, on the one hand, and the increased relative size of private holdings and transactions in these markets over the last ten years, on the other hand, have shifted into private hands a substantial measure of control over international liquidity. This is sometimes described as the growing "privatization" of the international monetary system.

#### TABLE 27

The Eurocurrency market and reserve holdings, 1971-1980 (End-year; billions of US dollars)

	1971	1975	1978	1979	1980
Gross size of Eurocur-					
rency market: of which .	150	480	930	1190	1470
Liabilities to central banks	15	70	120	155	180
Net size of Eurocurrency				155	
market	85	250	485	600	735
World foreign-exchange reserves: <sup>a</sup> of which	134	225	356	390	
Developed market- economy countries .	109	138	235	245	
Major petroleum					
exporters	9	58	56	71	
Other developing coun- tries	16	29	65	74	

Source: Eurocurrency market: Morgan Guaranty Trust Company of New York, World Financial Markets, May 1981; Foreign-exchange reserves: UNCTAD, Handbook of International Trade and Development Statistics, 1979 (TD/STAT/8), table 5.2, and Handbook of International Trade and Development Statistics Supplement 1980 (TD/ STAT/9), table 5.2

<sup>a</sup> Excluding those of socialist countries.

The effects of the "privatization" of the market are making themselves felt in many different fields. In the first place, it has been associated with a rise in the capacity of the private sector to move enormous sums of money across the foreign exchanges, generating in the process fluctuations in exchange rates which monetary authorities have often found difficult to contain with the reserves at their disposal. The existence of such large sums of volatile funds, circulating in highly integrated capital markets, has also increased the difficulties of domestic monetary control and had a significant effect on the context within which reform of the international monetary system must be considered. As was noted earlier in this report, during the 1970s private financial institutions expanded their share of the long-term financing of the payments deficits of the non-oilexporting developing countries. This trend was associated with significant differences in the amounts in which, and the terms on which, external financing was made available to different categories of developing countries.

Naturally, the spectacular growth of the offshore markets increased the size of liquid assets available to private participants in the foreign exchange markets. Precise estimates of such private holdings, however, are difficult to obtain. One much-cited set of estimates of this kind was made by the United States Tariff Commission for 1969–1971.82 This indicates that the liquid assets held in the international money markets by seven major types of participant amounted to \$268 billion in 1971. This figure is clearly an approximate one, and there is some doubt as to how quickly some of the sums involved could be mobilized. However, even after any necessary qualifications have been made, a comparison of this total with the estimates for foreign reserves is instructive and lends support to the assertion of the Federal Trade Commission that its estimates "give evidence of the size of the independent, largely uncontrolled monetary system that has sprung up within the comfortable old world of domestic systems, central banks that manage them (or try to), and stocks of international reserves used to hold things steady until balance-of-payments 'adjustments' can work themselves out, largely through the mechanism of international trade."<sup>83</sup> No exercise similar to that of the United States Tariff Commission seems to have been carried out in recent years. But in view of the growth in the size of the international money market since that date the above statement seems more pertinent than ever.

It is beyond doubt that the expansion of the liquid assets at the disposal of private participants in the international money markets played an important role in the breakdown of the international monetary system based on fixed exchange rates. While the collapse of the Bretton Woods system also reflected the effects of other underlying factors, the speculative

<sup>&</sup>lt;sup>82</sup>United States Tariff Commission, Implications of Multinational Firms for World Trade and Investment and for U.S. Trade and Labour, Report to the Committee on Finance of the United States Senate and its Sub-Committee on International Trade (Washington, D.C., 1973), pp. 534-543.

<sup>&</sup>lt;sup>83</sup> Ibid., p. 541.

movements of large capital flows across foreign exchanges was perhaps decisive in the move to generalized floating in March 1973.

To be sure, the advent of generalized floating has dampened speculative capital moves under the protection of a one-way option. However, the floating system has given rise to another motive for capital movements, namely, capital flows generated by international portfolio adjustments. It is now commonly held that floating transforms international currencies into portfolio assets and that portfolio holders adjust their assets in reaction to changes in monetary expectations. Hence, the frequency of portfolio adjustments imparts increased volatility to short-term exchange rates. The empirical evidence confirms beyond any doubt the increased volatility of short-term exchange rates since March 1973. IMF data show that the average monthly variability of effective exchange rates rose for a group of developed market-economy countries from 1.1 per cent in the period January 1967 to March 1973 to 1.7 per cent in the period April 1973 to December 1978 and for another group consisting almost entirely of developing countries from 1.7 per cent to 2.4 per cent in the same periods.<sup>84</sup> However, these average monthly figures obscure the magnitude of the larger fluctuations in exchange rates during shorter periods.85

The spectacular rise in the size of, and in the investment activities associated with, private portfolios has also increased the linkage between financial markets and other asset markets.<sup>86</sup> This growing linkage is associated with improvements in communications, the greater knowledge and sophistication of investors, and the existence of institutions which complement their involvement in commodity trading not only with close links to the banking system but also in many cases the provision of financial services on their own account.<sup>87</sup> As a consequence of the

<sup>85</sup>For example, the average weekly effective exchange rates from April 1973 to April 1974 for the four major currencies, the U.S. dollar, the deutschemark, the pound sterling and the yen varied from 0.71 per cent (for sterling) to 0.93 per cent (for the deutschemark). Simultaneously, the maximum week-to-week changes in these rates varied from 2.55 per cent (for the dollar) to 6.4 per cent (for the yen), and the amplitude of these rates during the year varied from 9.97 per cent (for sterling) to 15.7 per cent (for the deutschemark).

<sup>86</sup>Investors and speculators, both private individuals and large financial institutions, are increasingly tending to consider not only gold and other precious metals but also base metals and other commodities as suitable assets for the purpose of diversifying their portfolios. See, for example, John Edwards, "A new breed of speculator", *Financial Times*, 24 January 1981. As Edwards puts it, "While the present uncertainty continues in the world monetary system, it is difficult to see normalcy return to the commodity markets. They are, after all, an alternative form of wealth increasingly referred to as 'paper' money".

<sup>87</sup>For the institutional framework within which commodity trading takes place, see the report by the UNCTAD secretariat, *Fibres and textiles: dimensions of corporate marketing structure (op.*  above, short-term foreign exchange rates have come to be determined in the asset markets in virtual isolation from factors operating in the long-term on the current account. Foreign exchange transactions have increased not only through the greater activities of private participants, but also through the increased intervention of monetary authorities trying to manage exchange rates and implement monetary control at the same time. Chart 14, which is based on rough estimates, demonstrates the dramatic rise in the average daily volume of foreign exchange transactions from 1970 to 1979.

The available evidence on the activities of major banks and the comments of observers at the time also indicates that it was the private sector rather than the monetary authorities which were primarily responsible for the large monetary movements which characterized periods of disturbance in the foreign exchange markets.

# A. The role of foreign exchange transactions in the international money markets

The increased size of the Euromarkets (especially of inter-bank transactions in them) has been closely associated with their growing involvement in the markets for foreign exchange. The evidence on the scale of this involvement is somewhat fragmentary but suggests that as much as 90 per cent of transactions in foreign exchange probably consists of interbank trading. This agrees with indirect evidence concerning the assets and liabilities of banks involved in the international money markets and the relationship between interest rates for borrowing and lending of different maturities.88 This indirect evidence can be gleaned in two ways. The first involves simply banks' repositioning in currencies. Under floating conditions borrowers and traders prefer taking a position in the currency of their transaction needs. The other turns on the forward-market function in cases where borrowers and lenders hedge against future spot-rate movements. The indirect evidence bearing on these matters is of the following kind. First, inter-bank transactions, when compared with those involving primary depositors and endusers, show very little maturity transformation. This maturity evenness, which is not typical of financial intermediation, is indicative of forward covering. Secondly, covered interest margins for a given maturity are closer to zero in the Euromarkets than in domestic and national markets. This implies that short-term capital flows are passing across currencies to hedge against foreign risks.

cit.), chapter II. This study documents the diversification of the major companies involved in the trading of primary commodities into fields such as the provision of financial services, their links with large banks, and the evolving networks of economic and financial intelligence in this area.

<sup>88</sup>Evidence on the proportion of foreign-exchange turnover consisting of inter-bank trading can be found in I.H. Giddy, "Measuring the world foreign exchange market", *Columbia Journal of World Business*, Winter, 1979, pp.41-43, and in Group of Thirty, *The foreign exchange markets and floating rates* (New York, 1980). Indirect evidence on the position of banks in the international money markets can be found in the *Bank of England Quarterly Bulletin*, various issues.

<sup>&</sup>lt;sup>84</sup>International Monetary Fund, Annual Report 1979 (Washington, D.C., 1979) table 13. The exchange rates used in these calculations were monthly import-weighted effective rates, and variability was defined as the standard deviation of the monthly percentage changes in rates in relation to the average monthly percentage change.

CHART 14 Indicative chart of world foreign exchange trading volume (Average daily volume of spot and forward trading)



Source I. H. Giddy, "Measuring the world foreign exchange marker", Columbia Journal of World Business, Winter 1979, p 38

# B. The impact of structural market changes on developing countries

As has been pointed out, the large mass of private holdings of international currencies generates disturbances and patterns of movements of footloose funds which curtail the autonomous conduct of economic policies. The limitations on national control are particularly evident in two areas: exchange control and control of the money supply and domestic interest rates. Many recent developments furnish ample evidence of the strains placed on international economic co-operation by the international transmission through capital movements of changes in national monetary policies.

The growth of international banking which has accompanied the expansion and structural change of international capital markets has from the beginning been associated with the growing activities of transnational corporations.<sup>89</sup> The close links between international banking activities and transnational corporations pose a dual problem for national governments as a result of their access to external finance from international banks. Transnational corporations can escape domestic credit controls, and by deciding where to direct their borrowed funds, can determine the direction of a significant portion of the pattern of global credit.

For the developing countries, these multiple facets of the "privatization" of the international monetary and credit systems have a considerable impact. In the first instance, the growing importance of the private sector in international finance has affected financial flows to developing countries during the last decade. The proportion of the long-term financing of the deficit on current account of the non-oilexporting developing countries which was accounted for by private flows other than direct investment rose from little more than 15 per cent in 1971 to almost one-half in 1979. During the same period the proportion of such financing which was accounted for by bilateral and multilateral official development assistance and other official flows fell from 62 per cent to 35 per cent. This new pattern of financial flows to developing countries has important implications both for the distribution among them of available funds and for their burden of interest costs.

<sup>&</sup>lt;sup>89</sup>On the relationship between the expanding activities of transnational corporations and those of international banks see, for example, United States Tariff Commission, *op. cit.*, pp. 506–517.

The financing from the international capital markets made available to developing countries has been highly concentrated on a relatively small number of borrowers. So far, only a few developing countries have managed to raise money in the form of international bonds. Many more have borrowed from the international banking system. However, even here a small minority has accounted for a large part of total borrowing by non-oil-exporting developing countries. Indeed, the share of such borrowing by only five countries varied from 55 per cent to 80 per cent during the period 1971-1979.<sup>90</sup> The role played by external financing in the balance-of-payments adjustment process of developing countries is discussed in part II, chapter 3 of the report. Suffice it here to emphasize that the shift in the financing of the payments deficits of developing countries towards private sources has made them increasingly vulnerable to the high and fluctuating international interest rates which have characterized much of the 1970s.

The increased role of private markets in the international financial system raises the question of the scope of activities of multilateral financial institutions. The issue is whether these institutions provide finance to developing countries facing either payments deficits or foreign exchange constraints in a manner that offsets or complements the financing patterns of private markets. To put the matter differently, it should be ascertained whether official institutions have exercised a residual banking role or have simply conformed to the financing pattern emerging from private financial markets. The evidence shows that in 1975 and 1976, two years of payments crisis, the IMF directed 50 per cent and 40 per cent respectively of the credit extended to developing countries to the 11 major borrowers on the Euromarkets.<sup>91</sup>

### C. The implications for international monetary reform

In the context of international monetary reform perhaps the main reasons for concern about the "privatization" of the international monegrowing ' tary system are its association with periods of harmful instability in the markets for foreign exchange and the closely-related question of the implications of the private sector's present role for attempts to bring the supply of international money and its distribution under better control. In the past there was often a tendency to assume that, apart from the benefits of increased trade and the like, which would accrue to all members of a smoothly functioning international monetary system, the interest of developing countries in reform lay principally in creating a link between the provision of new international liquidity, on the one hand, and of additional development finance, on the other. While schemes of this kind could still play a very useful role among measures designed to improve the size and distribution of financial flows to developing countries, the major stake of developing countries in international monetary reform lies in placing the creation and distribution of international liquidity in the context of a coherent global policy responsive to the requirements of the adjustment process.

The above discussion also suggests that developing as well as developed countries have a growing interest in any steps which would help to curb the currency turbulence associated with the huge international movements of funds which the private sector is capable of generating. Developing countries have been tending to expand their points of contact with the international financial system in recent years, and cannot avoid being affected by fluctuations in interest and exchange rates in world markets. Moreover, as was noted earlier, it is also likely that the prices paid to exporters of primary commodities will be increasingly affected by currency instability in view of the tendency now observable towards a closer relationship between foreign-exchange transactions on the one hand and investment and speculation in commodity markets on the other.

<sup>90</sup>UNCTAD, Handbook of International Trade and Development Statistics, 1979, (United Nations publication, Sales No. E/ F.79.II.D.2), and Handbook of International Trade and Development Statistics, Supplement 1980, (United Nations publication, Sales No. E/F.80.II.D.10 and corrigendum), table 5.12. The latter source also shows that, if borrowing by major petroleum exporters is included and countries are classified by their GDP per capita in 1977, developing countries with a GDP per capita of more than \$1,000 accounted for more than two-thirds of total borrowing by such countries in all years during the period 1973-1979 except 1974 (when the proportion was 61 per cent). In a recent article based on different statistical sources, T.- Killick shows that in March 1980 lower-income developing countries (defined as those with average income per capita of less that \$300 in 1978) actually had deposits in the Eurocurrency market of a total value larger than that of the loans which they had received from it. (See T. Killick, "Euromarket recycling of OPEC surpluses: fact or myth", The Banker, January 1981, table 5.)

<sup>&</sup>lt;sup>91</sup>Mexico, Brazil, Venezuela, Republic of Korea, Argentina, Algeria, Philippines, Nigeria, Indonesia, Ecuador, Chile.

# SHIPPING: STRUCTURAL CHANGE AGAINST THE BACKGROUND OF LONG-TERM TRENDS

Transport in general and shipping in particular are important aspects of international economic relations. Indeed, the structure and direction of trade and the organization of the shipping markets are closely linked and interdependent. It is not surprising, therefore, that countries which seek to improve their relative position in international trade have paid particular attention to the development of their merchant fleets. The structure of the world shippng market, however, has not made it easy for developing countries to increase their participation in the world carriage of seaborne foods. This section reviews developments in the world fleet ownership and technological changes in the shipping sector.

## A. Organizational and structural changes in the world shipping market

Since World War II considerable expansion of international seaborne trade and shipping has taken place, both in the dry and the liquid cargo sectors. The volume of seaborne trade reached 3.5 billion tons in 1978, a four-fold increase since the 1950s.

An overwhelming share of the supply of shipping services has remained in the hands of developed market-economy countries, and the organization and functioning of world shipping markets has continued to be shaped by their influence. Some forms of international shipping market structures, such as the liner conference system, date back to the 19th century. Others, in particular those predominant in the bulk trade, are of more recent origin.

Developing countries did not until very recently play an active role in the institutional developments in the world shipping market. As a result, dominant institutions in the organization of the world shipping market remain those established by the developed market-economy countries during the colonial period. The market has thus been characterized as follows:

In the general cargo trade, which accounts for 20–25 per cent of world seaborne trade, the dominant position has been held by traditional maritime shipowners operating cartel-type organizations of liner conferences.

In the oil and bulk trades transportation takes place within vertically integrated concerns.

A relatively small portion of the total dry bulk and oil trade is offered at shipping exchanges located in developed countries, where the demand for and supply of tonnage play a decisive role in determining the level of freight rates.

More recently, new trends have evolved in the organization of the shipping markets. These relate to

the expansion of horizontal links in the operation of container and dry-bulk ships, the expansion of strong and integrated links between the shipping industry and the international capital and financial markets, and the increasing use of open registries by shipowners in developed market-economy countries.

Initial action by developing countries in the restructuring process of the world shipping market occurred when they took the initiative in UNCTAD to bring the activities of liner conferences under international regulation through a multilateral legally-binding instrument. The initiative came primarily from shipper interests in developing countries, in order to reduce the level of freight rates and eliminate unilateral actions and arbitrary decisions of liner conferences. Their initiative was supported by shipowners in those countries, who sought to gain membership of liner conferences which was being denied to them.<sup>92</sup> After prolonged negotiations a United Nations Convention on a Code of Conduct for Liner Conferences was adopted in UNCTAD in April 1974.

The Convention, *inter alia*, regulates on equitable principles the relationship among member lines of a liner conference, on the one hand, and the relationship between shippers and liner conferences, on the other. Its objectives are to ensure rights of participation, for national lines to carry a substantial share of their own trades and in third-flag trades, to balance the interests between shippers and shipowners and to facilitate the orderly expansion of liner trade. It is expected that the Convention will enter into force early in the 1980s.

While the Convention will enable developing countries to enter their own liner trades with their own vessels, problems still remain because much of the valuable cargo is shipped by transnational corporations which channel shipments through the traditional conference member lines, leaving the lines of the developing countries with low-value and lowfreight-paying items.

The slow progress of developing countries in increasing their share of the world shipping tonnage, particularly in the bulk sector, is mainly attributable to the fact that fleet ownership and cargo controls are largely in the hands of transnational corporations which engage in vertically integrated operations, leaving the developing producing countries to play the role of passive suppliers of raw materials.

<sup>&</sup>lt;sup>92</sup>Their initiatives were strengthened by the fact that developing countries took a common stand in pursuance of the Charter of Algiers (1967) and the Lima Declaration (1972) adopted by the Group of 77.

This control not only frustrates any downstream development, but minimizes the share of the developing countries in the ultimate proceeds of the sale of their products, because the transnational corporations can use transfer-pricing techniques to minimize profits attributable to operations in developing countries.

Even where transnational corporations are not operating vertically integrated industries, bulk shipping is still in the hands of the traditional maritime countries by virtue of the close relationships between shipowners and shippers, the centralization of most of these shipping activities in a few cities, and the fact that shipping and banking have now become highly integrated, all the main banks being situated in the developed market-economy countries.

Notwithstanding the recognition of the principles of the Code of Conduct and the introduction of consultation procedures between liner conferences and shippers, the fact that the corporations of the former colonial powers still control shipment at both ends of a trade route enables them to influence the freight structure to their own advantage, arranging for cross-subsidization within the freight structure and seeing that any surplus goes to importers in developed countries in the form of rebates, rather than to producers in developing countries in the form of lower rates. In some developing countries moves are being made to consolidate consignments under the control of shippers' commodity groups, and this process offers some hope of changing the balance of power.

## B. Structural changes in the world fleet and future prospects

Little change has taken place in the basic structure of the ownership and control of the world fleet during the past 30 years. In 1955 the developed market-economy countries owned 89 per cent of the world fleet compared to 6 per cent for developing countries, and they have maintained this dominant position, owning 82 per cent in 1980. The major change that has occurred within this group of countries is the increase in registration of ships beneficially owned by developed market-economy countries under open registries. In 1955 the open-registry fleet accounted for 10 per cent of world tonnage, but by 1980 the proportion had reached 31 per cent. This fleet which is, to a large extent, manned by seafarers from developing countries, also carries the cargo generated by these countries. Yet, the full benefits of these operations accrue mainly to the ultimate owners in the developed countries.

Efforts to reverse these trends and to increase the participation of developing countries in world shipping date back to the third session of UNCTAD held in Santiago in 1972. At that session developing countries formulated a target for the growth of their national fleets so that by the end of the second United Nations Development Decade developing countries could achieve a 10 per cent share of the world fleet.<sup>93</sup> This target was indeed achieved in 1980.

As may be seen from table 28, the progress achieved by developing countries to date has been minimal. Further progress with regard to the participation of developing countries in the carriage of bulk cargoes generated by their foreign trade calls for implementation of measures aiming, inter alia, at elimination of institutional structural barriers to their participation such as open-registry operations and control over bulk movement exercised by transnational corporations. Such measures, including those enumerated in Conference resolution 120(V), when taken should enable the developing countries to achieve the target of owning at least 20 per cent of total world tonnage by the end of the 1980s, as set by the General Assembly in resolution 35/56 containing the International Development Strategy for the Third United Nations Development Decade.

#### TABLE 28

#### Distribution of world shipping tonnage by groups of countries of registration, 1970-1980 (Mid-year figures, in millions of dwt)

	T pero oj (in	Percentage share of world in tonnage		
Flag of registration	1970	1975	1980	1970-1980
1. World total	326.1 (100.0)	546.3 (100.0)	682.8 (100.0)	100.0
2. Developed market- economy countries	212.0 (65.0)	318.2 (58.2)	350.1 (51.3)	38.7
3. Open-registry coun- tries	70.3 (21.6)	161.9 (29.6)	212.6 (31.1)	39.9
4. Sub-total $(2+3)$	282.3 (86.6)	480.1 (87.9)	562.7 (82.4)	78.6
5. Socialist countries of Eastern Europe and Asia	21.7 (6.6)	33.1 (6.1)	48.7 (7.1)	7.6
6. Developing countries total (excluding open- registry countries) of which in:	20.5 (6.3)	30.9 (5.6)	68.4 (10.0)	13.4
Africa	1.1 10.7	2.5 17.7	7.2 39.1	1.7 8.0
the Caribbean Oceania	8.7 0.0	10.6 _0.1	21.8 0.1	3.7 0.2
7. Other, unallocated	1.7 (0.5)	2.2 (0.4)	3.4 (0.5)	0.5

Source: UNCTAD secretariat compilations.

Supplementing the above measures, concerted efforts are required to provide adequate manpower and training facilities for developing countries. Efforts are also being undertaken with regard to technical and economic co-operation among developing countries in the field of transport, particularly for the purpose of establishing transport links among themselves and thus increasing their collective selfreliance.

<sup>&</sup>lt;sup>93</sup>Conference resolution 70(III).

## C. Technological change in shipping and multimodal transport

Vast technological changes have been taking place in world transport and drastically affected the structure of the world's shipping and ports industries. The main discernible areas of such developments have included a rapid increase in the vessel size of tankers and bulk carriers. The economic reasons underlying this tendency relate first of all to benefits derived from economies of scale and lower transportation cost per unit of cargo. The tendency to expand the fleet of the large crude carrier and very large crude carrier type is due to the development of new forms of technology for the loading and discharging of oil, i.e. offshore and deep-sea terminals, which are not subject to the constraints of inland infrastructure. These carriers have now reached the size of 500,000 tons deadweight (dwt).

Conditions for dry-bulk carriers, however, have been different, as they have been faced by more complex problems and difficulties, in both exporting and importing countries, associated with inland facilities (a sufficient depth of water in ports, storage facilities, inland transport connexions). As a result, the average size of large dry-bulk carriers has stabilized at around 100,000 to 120,000 dwt.

The economic benefits accruing from lower costs due to the economies of scale in the sea link of the transportation chain could, to a large extent, offset the increases in ship prices, bunker prices and some other operational costs.

The high costs of labour-intensive cargo handling of break-bulk commodities in developed countries led in the 1960s to the development of unitization and of containerization and multimodal transport operations. Containerization and multimodal transport, after having been confined to the trades among developed countries, characterized by relatively large volumes and balanced flows, was also introduced in the trade of developing countries, with a time-lag of about 10 years.

Apart from containerization, various other forms of unitization, either competing with or complementing containers, have evolved. These comprise pallet, unit load, barge and roll-on-roll-off (Ro-Ro) trailer operations, both in a specialized form and in a wide variety of hybrid forms.

The large capital outlay required from shipowners operating container services has made organizational changes in shipping necessary. In order to be able to raise the necessary finance to operate such capital-intensive systems and to rationalize services, shipowners formerly competing with each other in the framework of conventional liner conference services have joined forces in the formation of consortia and other forms of intensive co-operative agreements, further reducing competition within the conferences. However, at the same time, powerful containership operators outside the conferences have emerged. Additional emergent competitive factors are landbridge services, which have been introduced by both vessel-operating and non-vessel-operating multimodal transport operators (MTOs), providing shippers with alternatives to conventional unimodal services.

The large capital requirements, and the way in which shipowners of developed countries have responded to containerization limit the extent to which developing countries can participate in international container transport. The option for operators in developing countries is either to join existing consortia or to co-operate on a regional basis in order to compete successfully with existing operators. International multimodal transport and containerization have increased the interdependence of various modes of transport and their technological adaptation to the container has enabled the realization of door-to-door transport. The intermodality of containers allowed for and necessitated the emergence of MTOs who assume responsibility for the performance of international multimodal transport operations.

The world-wide expansion of containerization led to the convening in UNCTAD of a United Nations Conference on the International Multimodal Transport of Goods and the adoption of a Convention on the subject in May 1980, whereby international multimodal transport operations are brought under mandatory international control. Under the terms of the Convention not only is recognition given to the rights of States to regulate multimodal transport operations within their respective jurisdictions, but also an equitable and documentary regime is established from which parties may not derogate. The Convention should thus bring a further element of order and of harmonization of policies into the expanding world-transport sector, once it enters into force.

#### **D.** Developments in ports

The important structural changes that have taken place in the port sector have been the result of four major interrelated elements, namely the growth of world trade, structural change in the shipping sector, developments related to inland transport modes and advances in cargo-handling techniques.

The consequences of larger and more specialized ships have been that new infrastructure and superstructure facilities were required; offering muchneeded safe approach and berthing, quick turnaround and appropriate care for the cargoes. They have thus had an impact at the technical, economic and social levels.

The impact has been felt, *inter alia*, in connexion with the access facilities to ports, because of the more frequent use of deep-draft ships. Not only will this influence the cost of facilities, it may also ultimately force governments to build ports in new locations, away from the existing port facilities. New equipment will be required, which is characterized by two common features: namely an increasing degree of sophistication and, as a corollary, high initial investment costs. As regards equipment, it is important to emphasize the greater dependency of developing countries on the developed ones for the acquisition and maintenance of such equipment, and the associated need for scarce foreign exchange.

Another aspect of the above-mentioned increases in scale, sophistication and cost of new port facilities is the larger demands on public funds to finance expensive port investments and the increasing recourse at the same time to loans on non-concessional terms from private bank consortia or international lending institutions.

Furthermore, labour-intensive techniques have been increasingly replaced by more capital-intensive ones. Almost without exception, high unemployment among the unskilled labour force, as well as a marked shortage of skilled port personnel, have been the result. In a modern port less, but better-trained, dock labour is required in order to handle the modern equipment which is being introduced. But just as important as the dockers are other port per-

sonnel, including maintenance staff and operations management. To ensure the availability of the appropriate port labour force, excessive manual, unskilled, low-productivity labour must be converted into technically-advanced, highly-skilled and possible. highly-productive labour, whenever creating new employment opportunities for displaced labour in the downstream activities of ports. There is thus a need for large-scale training and retraining. In the ports of most developing countries this conversion is likely to be costly, slow, and frustrating, and only a fully comprehensive new manpower policy will satisfy the requirements in the coming decades.

## Part IV

# THE DECADE OF THE 1980s: THE WORLD ECONOMY IN TRANSITION

### Chapter 1

## **AN OVERVIEW**

This part of the report discusses selected problems and possible ways of dealing with them in the next two decades. Chapter 1 draws upon the analyses carried out in parts I and II, identifying certain factors in the current economic situation which indicate that, unless policies are significantly changed, world economic growth will be substantially lower in the 1980s than in earlier decades. It then traces the implications of such slow growth for developing countries, given past trends in economic structures and policies. It concludes that a pattern of development which relies on existing mechanisms of transmission of growth would lead to low growth rates in developing countries as a result of the expected slowdown in growth in the world economy in general. This outcome could prove particularly arduous for developing countries and would contribute to increased social and political instability which in turn would have severe economic consequences.

In the light of this conclusion that slower growth rates may themselves provoke unstable situations, chapter 2 examines the consequences of an independent and self-sustained acceleration of growth in developing countries, in the absence of any other measures to restructure the world economy. A world trade model is used to estimate the size of trade and production imbalances which would emerge in a world of increasingly divergent growth rates as between developed and developing economies. It is found that the size of the trade imbalances generated over the next decade or so is such that reliance solely on financial measures to reconcile them would result in levels of indebtedness and a debt structure that could not be sustained by the existing financial mechanisms. However, over a longer period the dis-tribution of world production would become more balanced and in the long run would produce more sustainable trade patterns as well.

In particular, if solutions could be found to the medium-term trade imbalances associated with accelerated growth in developing countries, the improved performance of developing countries made possible by that growth could reinforce the long-term trends towards a more balanced pattern of world trade and production. Thus, the achievement and maintainance of faster growth by developing countries may be viewed as a medium-term problem, which, if solved, would allow time for bringing about the longer-term structural changes required in the world economy.

Chapter 4 discusses in more detail the implications of the projections for three sectors of special importance to the development process, namely manufacturing, food and energy. It concentrates on the nature of the changes which would come about in the next two decades with respect both to national economies and the structure of international trade. The projections indicate that, while world food supplies may be sufficient to meet requirements, developing countries would continue to be importers of basic foodstuffs. For most of them, the additional burden on the balance of payments imposed by these imports would not be very significant. However, a number of low-income countries, suffering from slow growth and adverse ecological conditions, would continue to need external assistance in the year 2000 to ensure an adequate level of food imports. If high growth rates are achieved, a large part of the world's population in developing countries would benefit from a process of rapid industrialization. Manufacturing output in these countries would become more balanced in structure, as production of the capital goods industries increased and eventually surpassed production levels in light industry. Further, a strong upsurge in trade among developing countries would be associated with fast growth in manufacturing output because of specialization within the developing world. However, the need to develop domestic energy supplies could imply heavy investment costs. By recourse to energy-saving technologies and energy development paths that economize on capital, the domestic as well as the foreign exchange component of energy costs could be substantially reduced.

## THE PROBLEMS OF THE 1980s

The review of the current economic situation presented in part I and the analysis of the post-war period contained in part II of this report clearly indicate that the problems facing the world economy are not cyclical in nature but rather reflect deep-seated and long-term phenomena. While there are basic differences in the economic environments in which different countries and groups of countries find. themselves, nevertheless there are a number of common factors which point to somewhat slower growth in the 1980s than in the previous three decades.

First, as was made clear earlier, it is unlikely that the unprecedented rates of growth of productivity of the post-war years can be maintained indefinitely. In particular, it should be borne in mind that the trend rate of increase of productivity over approximately the 100 years ending in 1970 for what today are considered developed market-economy countries was about 1.7 per cent per annum, which contrasts sharply with the average of over 3 per cent during the period 1950-1970.<sup>94</sup>

Second, projections of labour force growth in the developed countries indicate that growth will be significantly below historical rates in the 1980s and 1990s, particularly in North-western Europe, the socialist countries of Eastern Europe and Japan. Indeed, in North-western Europe the male labour force is expected to undergo an absolute decline in the late 1980s. On the other hand, among developing countries the major exporters of manufactures in Asia are the only group expected to show any significantly slower growth of the labour force.

Third, the developed market-economy countries as a group have become increasingly dependent upon external sources for many of their raw material requirements, with energy being the most obvious example. By itself this is not a constraint on growth, particularly if these countries are able to pay for higher imports through higher net exports of manufactures. However, the terms of trade of raw materials relative to manufactures are quite sensitive to changes in aggregate demand. At the same time, external sources of energy must fill the gap between an essentially fixed or slowly growing supply of domestically produced energy and a demand which is closely tied to the level of economic activity. Rapid economic expansion on the part of these economies in such a situation will inevitably result in very large trade imbalances exacerbated by strong upward pressures on prices.

Fourth, many of the developed market-economy countries appear to be having increasing difficulties in controlling their domestic price levels. While there is an element of imported inflation in this situation, the underlying causes are to be found for the most part in domestic economic and social structures. At the same time, there has been a significant shift towards the use of restrictive monetary policies as the major policy tool in attempts to control inflation. To date, however, there have been few indications of a dramatic reversal of inflationary tendencies. Indeed, given that the sources of inflationary pressures have changed and that problems of inflation have been compounded by the other factors mentioned above, a sustained reversal would be unlikely in the absence of significant changes in policy.

For all of the above reasons, it would seem that the developed market-economy countries will not be able to approach previous levels of economic performance for some time to come. This conclusion is reinforced by the observation that the structural changes and technological innovations required for a return to balanced growth require long gestation periods. Furthermore, significant shifts have taken and are taking place in the nature and dimensions of the economic problems confronting the developed market-economy countries and their solution generally calls for the creation of a new social consensus before the requisite changes in economic policies can be made.

The inescapable conclusion is that a return to former rapid rates of economic growth is unlikely in the foreseeable future. Similar conclusions have also been reached by other institutions. For example, the World Bank estimates that the developed marketeconomy countries will grow at a rate of about 2.8 per cent per annum on average during the 1980s as a whole if present policies in those countries remain unchanged.<sup>95</sup> On the assumption of a dependency relationship, the World Bank staff conclude that the developing countries would grow at 4.5 per cent per annum.<sup>96</sup>

Using a model incorporating the same dependency relationship, estimates by the UNCTAD secretariat<sup>97</sup> of likely future rates of growth for developing countries agree in broad outline with those of

<sup>&</sup>lt;sup>94</sup>Over the longer run it is extremely difficult to predict the timing and impact of new technologies. Thus, any assumption about productivity in the future would become less and less certain the longer the perspective taken.

<sup>&</sup>lt;sup>95</sup>World Bank, World Development Report, 1981 (Washington, D.C., August 1981) pp. 8-10.

<sup>&</sup>lt;sup>96</sup>*lbid.* p.15. On the other hand, the World Bank also examined a set of complementary policies which, resulting in a rate of growth of 3.6 per cent per annum for the developed marketeconomy countries, would allow developing economies to achieve a 5.7 per cent rate.

<sup>&</sup>lt;sup>97</sup>See Chapter 3 for a brief description of the UNCTAD model.

the World Bank, given their respective assumptions regarding rates of growth in the developed marketeconomy countries. However, the World Bank's assumptions in this respect appear to be somewhat optimistic, particularly in view of the outlook for 1981-1982. For example, assuming an annual average rate of growth of GDP of about 1.8 per cent in 1981-1982, the World Bank's "low" scenario would require that the developed market-economy countries achieve an annual average rate of about 3.1 per cent for the remainder of the decade. A similar calculation results in an annual average rate of growth, on the basis of the "high" scenario, of 4.1 per cent. In the light of the problems facing these economies, it is unlikely that even the "low" assumption will prove realistic unless policies change significantly.

If the somewhat exceptional nature of economic growth in the 1950s and 1960s is taken into account, an alternative basis for estimating probable growth in the 1980s would be to examine long-term productivity trends in conjunction with the expected growth of the labour supply. The male labour force in developed market-economy countries is likely to grow at about 0.6 per cent for the decade as a whole. On the basis of the long-term productivity trend of 1.7 per cent per annum noted above, the rate of growth of GDP for the developed market-economy countries in the 1980s would average about 2.3 per cent. A higher participation rate of the female labour force may contribute to increasing the growth rate somewhat, raising the rate to perhaps 2.4 per cent.

In the past it has proved difficult to maintain for prolonged periods widely differing rates of economic expansion among different groups of countries which have close trading relationships. For developed market-economy countries and developing countries this point is illustrated for the period 1960-1980 by the rates of growth of GDP in chart 15. Nevertheless, the decade of the 1970s and in particular the latter half, has been characterized by some widening of the gap in growth rates between the two groups of countries, the rate of growth having slowed down in both groups. Growth in the developing countries, moreover, would not have reached the actual rates experienced were it not for the large current account surpluses of some developing coun-(mainly the petroleum exporters), which tries directly and indirectly financed the increased trade deficits of many other developing countries, caused in part by slackening growth in developed marketeconomy countries.

However, the implications of the World Bank projections are that these differential rates of growth cannot be maintained, and that the gap between the two rates would not be more than about 2 percentage points at best. This projection reflects the constraints on the volume and terms of financing that are expected for developing countries in the 1980s. With respect to private financial flows it is already clear that many developing countries have reached the point where they cannot afford further financing of their deficits on non-concessional terms and are adjusting to the current recession through a curtailment of imports and a slackening of growth. (See part II, chapter 3.) On the other hand, the governments of major developed market-economy countries have made it clear that they will be unable to improve significantly their current performance in respect of official development assistance. In these circumstances the scope for developing countries as a whole to accelerate implementation of their development programmes is severely limited.

#### TABLE 29

Possible patterns of world growth in the 1980s (Annual average rates in per cent)

	Ac	tual	Projections 1980-1990		
Economic areas	1960- 1970	1970- 1980	World High	d Bank Low	UNC- TAD
Developed market economy countries Socialist countries of	• 4.9	3.2	3.7	2.8	2.4
Eastern Europe	6.6	5.3	3.9	3.9	3.5
Developing countries	5.9	5.6	5.7	4.6	4.2
Socialist countries of Asia .	6.8	5.5	5.3	5.3	5.0
Growth elasticity <sup>a</sup>	1.20	1.75	1.54	1.64	1.75

Source: Actual data are UNCTAD secretariat estimates based on national and international sources. The World Bank high and low projections for 1980-1990 are taken from the World Development Report, 1981. The alternative UNCTAD projection is based on UNCTAD secretariat estimates. The World Bank country groupings are not strictly comparable with those of the UNCTAD secretariat.

Note: These aggregate growth rates on the basis of 1975 prices and exchange rates differ somewhat from the growth rates computed on the basis of a chain index in part II, chapter 3.

<sup>a</sup> Ratio of the growth rate for developing countries to that of the developed marketeconomy countries.

It is extremely difficult to determine just to what extent aggregate output in developing countries would be affected by slower growth in the developed market-economy countries. As shown in table 29 the growth elasticity rose from 1.20 in the 1960s to 1.75 in the 1970s. The World Bank's projections imply elasticities of 1.54 and 1.64 for their high and low scenarios, respectively. One reason why the elasticity tends to increase with slower growth in the developed market-economy countries is that the agricultural sector is less dependent on external conditions and at the same time accounts for a large share of total gross output in developing countries. This more limited exposure to the outside world is particularly true of the subsistence sector where output generally just keeps pace with population growth in the sector.

On the basis of the highest elasticity actually experienced, growth in developing countries in the 1980s would reach only about 4.2 per cent per annum on average. In that event, the implications for unemployment in developing countries for the 1980s and 1990s would be very serious indeed. While rates of growth in the labour force of developed marketeconomy countries are falling, those of the developing countries are projected to accelerate and to surpass the growth of population. The projections show a labour force expansion ranging from 2 to 3 per cent per annum for most regions (see chart 16 and annex tables B.6 and B.7). As early as 1990 the rate of growth of the potential labour force in developing countries will exceed that of the developed CHART 15

## Gross domestic product of developed market-economy and developing countries, 1960-1982



Source: UNCTAD secretariat calculations.



CHART 16

Demographic indicators for developed market-economy and developing countries, 1965-2000

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market-economy countries by about 1.75 percentage points.<sup>98</sup>

Moreover, the growth of the potential labour force will be concentrated in the non-agricultural sectors. As shown in table 30 rates of growth of the agricultural population are substantially below those of the total population because of the exodus from the countryside to the towns. Since the agricultural population in developing countries is some 60 per cent of total population, the growth of the non-agricultural population could be as high as 4.6 per cent per annum in the 1980s. Since increases in productivity

#### TABLE 30

Projected population growth rates by sector in developing countries 1980-1990

(Percentages)

	Total	Agriculture	Other
Share in total	100	60	40
	2.5	1.1	4.6

Source, UNCTAD estimates, based on international sources

in these countries can be expected to be at least potentially higher than in the developed marketeconomy countries, unemployment rates in the developing world can be expected to grow rapidly unless there is a significant acceleration in the growth of their GDP. In this connexion it is important to note that the movement out of agriculture contains a relatively high proportion of people of working age, and hence the potential labour force of the non-agricultural sector would grow still faster than its total population, perhaps at an annual rate of about 4.8 per cent, at a conservative estimate. Assuming that the long-term rate of growth of productivity in the nonagricultural sector of developing countries were to attain a level of 2 per cent, as opposed to a historical trend of 1.9 per cent, gross value added in the nonagricultural sector would need to expand by 6.9 per cent per annum merely to prevent any further

increase in the already high unemployment rates. If a continuation is assumed of the historical relationships between the agricultural and non-agricultural sectors, GDP in the developing countries would grow by at least 6.3 per cent per annum in the 1980s. Thus, unless the developing countries succeed in loosening their present dependence on growth and demand in the developed countries, unemployment rates in developing countries can be expected to accelerate dramatically in the 1980s.

It is more difficult to judge the impact the slower growth in the developed market-economy countries will have on the socialist countries, which are better able to insulate themselves from the impact of unfavourable conditions in the rest of the world. However, one of the most serious constraints facing the socialist countries of Eastern Europe is the slower growth of their potential labour force, which is projected to fall from an average of about 1.1 per cent per annum in the 1970s to 0.7 per cent in the 1980s, with probable effects on the growth of total output.

China, which is by far the largest socialist country of Asia in terms of both production and population, is even less tied to the international trading system. However, as noted above, recent policy changes have led to sharp increases in the volume of China's foreign trade. It thus seems unlikely that China could accelerate significantly its current growth rate of about 5 per cent per year within the context of current international economic relations.

It is essential to an understanding of the problem to recognize that slow rates of growth in the developing world would almost certainly increase political and social instability and that this in turn would contribute to increased international tensions, and stimulate in all likelihood a further diversion of scarce national resources from productive capitalinvestments to military expenditures. Furthermore, history provides few examples where sustained and rapid increases in apparent military prowess have not led to opportunities to test that prowess. Such a pattern of resource allocation hardly represents a practicable means of adjusting to unfavourable economic conditions nor would it be self-sustainable. It is essential that attention be given to the implications for the world economy of accelerated growth in developing countries of a kind which bears some relation to their development needs.

<sup>&</sup>lt;sup>98</sup>The "potential" labour force is estimated on the basis of the projected structure of the population by age and sex and incorporates assumptions concerning participation rates.

## Chapter 3

## ACCELERATING GROWTH IN DEVELOPING COUNTRIES AND GLOBAL STABILITY

## A. A possible scenario

As was argued in chapter 2 of this part, the continuation of present patterns of growth in the context of existing structures of international trade, finance and institutional relations would create serious and accumulating strains in the world economy and could lead to an inherently unstable situation in the longer run. In one way or another, "structural" change in the world economy and in international economic relations is bound to occur. The question is not whether structural changes are required, but rather what the nature of the transformations would be under different sets of circumstances. A breakdown of international co-operation and the concomitant increased potential for military conflict would lead to "structural" change just as surely as would vigorous implementation of a well-designed international development strategy. Nevertheless, it is clear that an examination of the former would not be a particularly useful exercise.

Indeed, the analysis of the previous chapter which indicated, *inter alia*, that developing countries would need to grow at a minimum of 6.3 per cent during the 1980s only to halt further increases in their already very high unemployment rates, provides a strong economic rationale for the growth target of 7 per cent contained in the International Development Strategy for the Third United Nations Development Decade. Given the growth requirements of developing countries over the next two decades, it may even be considered rather conservative.

In the light of the above, this chapter explores the implications for patterns of world production and international trade of a gradual but significant acceleration of growth in developing economies in a context of continued slow growth in the developed market economies. It should be emphasized at the start that such a scenario is not presented as the most likely course of developments over the remainder of the decade. Rather, the simulation is intended to identify the magnitude and character of the changes which would take place, assuming that economic behaviour continued to be governed by bilateral relationships. If significant differentials are assumed in the growth rates of developed market-economy countries on the one hand and developing countries on the other, it is evident that severe strains would emerge. The intention is to explore these points of strain and use them as indicators of the areas and directions where structural changes would need to take place to accommodate a successful development effort on the part of developing countries.

#### **B.** Technical assumptions

Quantitative estimates illustrating the changing patterns of production and trade have been made with the aid of a world growth and trade model based on 15 regional macro-economic growth submodels linked together by a set of trade submodels explaining trade patterns in four commodity groups and non-factor services. For this exercise the growth rates of each region have been imposed on the model in order to override the pattern of growth rates which would emerge from the interaction of historically determined behavioural relationships. Within the structure of the model, consumption and import demand are determined by domestic income levels and, to varying degrees, by relative prices. The demand for exports for a particular region is a function of the import demand of all other regions. The share of a particular region in the imports of the various other regions is determined by historical patterns and by its share in world production in the related sector. Relative prices also play a role in the explanation of trade shares. In order to concentrate on the interplay of real forces, exchange rates are assumed to adjust fully for any discrepancy between domestic export prices and international prices. Finally, the normal constraints on the distribution of external saving and financial flows have been removed by not allowing balance-of-payments considerations to influence import propensities.

The growth assumption underlying this scenario is that developing countries as a group increase their rates of growth gradually during the 1980s, reaching a rate of approximately 7 per cent by 1990. However, different regions are assumed to approach the 7 per cent target at different rates, depending upon their initial situation (for details see table 31).<sup>99</sup> In contrast to the developing regions, the developed economies are expected to grow at 2.4 per cent for the decade of the 1980s as a whole, on the assumption of unchanged policies and taking into account productivity and labour supply trends. (See the discussion in chapter 2.)

Given that the major constraints to growth for the socialist economies of Eastern Europe are internal and that their growth is largely planned, no change is made regarding their growth rates relative to the

<sup>&</sup>lt;sup>99</sup>Moderately slower growth is assumed for the fastest-growing regions, taking into account the likelihood that rates of growth of 8-9 per cent could not be sustained indefinitely, particularly when growth of GDP in the major developed markets is slow.

## TABLE 31

Production and trade simulation 1980-2000 GDP growth rate assumptions (Percentages)

Couniry group	1960- 1970	1970- 1980	1980- 1990	1990- 2000
Developed market-economy				
countries	4.94	3.24	2.40	2.55
Socialist countries of Eastern				
Europe	6.59	5.31	3.50	3.50
Developing countries of which:	5.88	5.63	6.44	6.99
Western Hemisphere	5.80	5.59	6.60	7.01
N. Africa and West Asia .	8.68	6.06	5.88	7.00
Other Africa	4.73	3.80	5.02	6.90
Other Asia	4.89	5.97	7.02	7.01
Socialist countries of Asia	6.82	5.51	6.01	7.00
			1	1

Source: UNCTAD secretariat estimates for 1960-1980, based on international sources. Note: These aggregate growth rates on the basis of 1975 prices and exchange rates differ somewhat from the growth rates computed on the basis of a chain index in part II, chapter 3.

ones discussed in chapter 2. The socialist economies of Asia, which are considered to be developing economies, are assumed to follow the same pattern of accelerated growth as other developing regions.

#### C. Magnitude of income disparities

It is noteworthy that in spite of two decades of faster growth in developing countries than in the developed ones, the *per capita* GDP of developing countries in relation to that of developed marketeconomy countries has remained virtually constant. Further, even the scenario under examination here results in very slowly-changing production patterns on a per capita basis. Thus, the transformation of the world economy into one with a more balanced and dynamic structure is a process spanning many decades even under the most favourable of circumstances. For example, if the pattern of growth assumed for this projection were maintained to the year 2000, and if the rate of growth of population of developing countries were to decline significantly, the average level of per capita GDP in those countries would still be only some 15 per cent that of the developed market-economy countries. It is clear that a more or less balanced and equitable distribution of world resources and production is several decades away. Chart 16 illustrates graphically the enormous dimension of the problem.

However, if the relative weights of developed and developing countries in world production are examined, the picture is quite different. The relative weight of developing countries in world economic activity has grown considerably in the last two decades (see chart 17 and table 32). The share of developing countries in world production has increased by some 24 per cent over the last two decades. Admittedly, the absolute increase is less substantial, given their small share in 1960. However, if the pattern of growth rates examined here were to materialize and be sustained, the developing countries' share in world output would increase by a further 32 per cent, to reach one quarter of world output in 1975 prices by the year 2000. On the other hand, the share of developed market-economy countries would fall from about 72 per cent in 1960 to 50 per cent in 2000.

If allowed to occur, this process would significantly alter the dynamics of world growth and economic activity in the long run. Growth in developing countries would become increasingly independent of circumstances in the rest of the world. Further, they would acquire the potential of becoming an engine of growth not only for their own development but also for that of the rest of the world. This would serve to increase the stability of the world economy as a whole and thus improve the prospects for sustained growth.

#### D. The evolution of trade patterns

While it is clear that two decades of rapid growth in developing countries could have a substantial impact on the present imbalances in world production structures, serious strains would be placed on the international trade and finance system in the interim. In fact, the changes in trade patterns consistent with the changes in production patterns presented above, given historical behavioural relationships, indicate that the trade imbalances involved would become very large by 1990.

TABLE 32

Shares in world production and population (Percentages)

	Population	GDP	Per capita GDP №	Ratio b
Developing countries				
1960	42.9	11.9	27.2	0.09
1970	45.6	12.6	27.6	0.08
1980	48.7	14.7	30.2	0.09
1990	51.8	19.6	37.8	0.11
2000	54.9	25.9	47.2	0.15
Socialist countries of Asia				
1960	23.6	4.0	16.9	0.05
1970	23.6	4.5	19.1	0.06
1980	23.1	5.3	22.9	0.07
1990	22.5	6.7	29.8	0.09
2000	21.8	9.0	41.3	0.13
Developed market-economy co	untries			
1960	22.9	72.1	314.8	1.00
1970	21.2	69.4	327.4	1.00
1980	19.4	64.7	333.5	1.00
1990	17.7	58.3	329.4	1.00
2000	16.2	50.5	311.7	1.00
Socialist countries of Eastern	Europe			
1960	10.6	12.0	113.2	0.36
1970	9.7	13.5	139.2	0.43
1980	8.8	15.3	173.9	0.52
1990	7.9	15.4	194.9	0.59
2000	7.1	14.6	205.6	0.66

Source: UNCTAD secretariat estimates and projections.

<sup>a</sup> As a percentage of average world per capita GDP.

<sup>b</sup> Ratio of per capita GDP of the country group to that of the developed marketeconomy countries.

CHART 17 Shares of major economic groups in world gross domestic product, 1960-2000



Table 33 summarizes the position of developing countries as a group. For example, it shows that developing countries as a whole would have a trade deficit (goods and non-factor services) equivalent to 6.9 per cent of world exports in 1990. This would correspond to about 2 per cent of the GDP of developed countries and is equivalent to the net transfer of resources which would be required by developing countries under this scenario. For purposes of comparison, the corresponding trade deficit in 1975 for developing countries equalled approximately 0.3 per cent of the combined GDP of developed countries. Thus it would appear that imbalances of the above orders of magnitude could not easily be accommodated within the existing framework of international economic relations. In particular, existing international financial mechanisms probably would be unable to support a net transfer of resources to developing countries of the above order of magnitude without creating an impossible debt burden for developing countries. Nevertheless, as will be demonstrated below, the problem of generating an adequate transfer of resources is a medium-term one which, if solved, would enable the developing coun-

TABLE 33 Developing country trade balances

	1975	1990
Deficit on goods and non-factor		
services as a percentage of: World trade	-1.8	-6.9
GDP of developed countries	-0.3	-2.0
Exports from developing countries	-8.2	- 20.8
GDP of developing countries	- 8.2	-20.8

Source: UNCTAD secretariat estimates and projections.

tries in the long term to achieve balanced and selfgenerating growth not dependent upon external resources.

Before examining the trade balances by commodity groups, however, one further aspect of the estimated trade gap for 1990 should be noted. If the gap is looked at from the point of view of the slower-growing developed economies, the required net transfer of resources increases by more than sixfold relative to their GDP from 1975 to 1990. On the other hand, viewed in relation to the exports of developing countries, the increase is a little over onethird of that amount, about two and a half times. Thus, the increase in the trade gap seems extremely large only when measured against the relatively weak growth performance of the developed marketeconomy countries.

The pattern of changes in trade balances is even more interesting when examined by broad commodity groups (see table 34). For food and beverages, the developing countries' surplus falls from 17.5 per cent of their own exports of these products to 5.7 per cent in 1990. The surplus on account of raw materials falls in relative terms, from 61.2 per cent to 33.9 per cent over the same period, with energy showing a slight decline, from 71.1 per cent to 66.9 per cent. On the other hand, for manufactures, the pattern is reversed, and the deficit falls from 318 per cent of exports in 1975 to 183 per cent in 1990. At the same time the importance of manufactures in total exports of goods by developing countries shows an increase from 18.4 per cent in 1975 to 31.8 per cent in 1990 in current prices.

TABLE	34
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Developing country trade balances by commodity group (Percentages)

Commodity group	(X-M)/X		Xi/Xg	
	1975	1990	1975	1990
SITC 0+1	17.5	5.7	15.9	4.3
SITC 2+4	61.2	33.9	11.9	3.4
<b>SITC 3</b>	71.1	66.9	53.8	60.5
SITC 5-9	-317.8	- 183.5	18.4	31.8

Source: UNCTAD secretariat projections.

Note: (X-M)/X refers to the trade deficit by commodity group as a percentage of developing country exports of that group.  $X_i/Xg$  refers to the share of exports of each commodity group in total exports of goods.

Thus, the deterioration in the aggregate trade deficit of developing countries relative to their exports is composed of three factors. First, their traditional large surplus on account of primary commodities diminishes over the simulation period, although a substantial surplus still exists in 1990. Second, and reinforcing the first factor, the importance of primary commodities in total exports declines significantly. Third, and counteracting the above two trends, the deficit on account of manufactures declines over the period while at the same time exports of manufactures increase their share in total exports.

It follows that the growing trade deficit incurred by developing countries is not irreversible. The declining deficit on account of manufactures relative to exports of manufactures, together with the increasing importance of manufactures in total exports, imply that ultimately the overall trade deficit will begin to decline in relative terms in spite of large growth differentials between developing countries and the rest of the world. This conclusion is reinforced when the changing pattern of trade in manufactures and the growth of trade among developing countries are examined.

A method of revealing the changing trend of trade deficits relative to export levels is to compare the incremental changes in deficits and in export levels over consecutive time periods (1980–1985 and 1985–1990). An examination of movements in exports and trade balances for manufactures for the Western Hemisphere, Africa and Asia reveals that in all cases the increase in the deficit relative to world trade was larger than the increase in exports over the period 1980-1985 (see charts 18A-C). However, in the period 1985–1990 the increase in exports was larger than in the preceding period in all cases while the increase in the deficit was smaller for the Western Hemisphere and Asia. Further, for Asia, the increase in exports of manufactures in the latter period excluded the increase in the trade deficit, again relative to world trade. This overall pattern implies that while the trade deficits increase very rapidly relative to export levels at first, over time increases in export levels outpace increases in trade deficits, thus beginning to reduce the latter's economic importance.

Also contributing to a balancing of world trade patterns is the momentum of trade among developing countries, with a concomitant declining share in world trade of trade among developed marketeconomy countries. For food and beverages the increase in the share of trade among developing countries in world trade amounts to 2 percentage points and there are increases of 1.9, 4.8 and 5.2 percentage points for raw materials, energy and manufactures, respectively (see table 35). For developed market-economy countries the only exception to a relative decline in the share of trade among themselves in world trade is raw materials, where such trade increases by 0.8 of a percentage point. With respect to trade in manufactures, under this scenario trade among developing countries accounts for 50 per cent of their total exports in this commodity group by 1990. Thus, the tendency towards increased trade among developing countries confirms that not

## CHART 18A

Projected changes in exports and trade balance (SITC 5-9), 1980-1990

Developing countries in the Western Hemisphere





Increase in exports of manufactures for the Western Hemisphere as a percentage of world trade.



Increase in trade deficit in manufactures for the Western Hemisphere as a percentage of world trade.

Source UNCTAD secretariat calculations

#### CHART 18B

## Projected changes in exports and trade balance (SITC 5-9), 1980-1990

Developing countries in Africa



Source: UNCTAD secretariat calculations

## CHART 18C

Projected changes in exports and trade balance for (SITC 5-9), 1980-1990

Developing countries in Asia



.....

as a percentage of world trade.

Increase in trade deficit in manufactures for Asia as a percentage of world trade.

Source UNCTAD secretariat calculations
That among acteroping countries									
	SITC 0+1	SITC 2+4	SITC 3	SITC 5 - 9					
		Percen	tages						
Increase in trade among devel- oping countries as a percentage of increase in world trade	2.0	1.9	4.8	5.2					
Trade among developing countries as a percentage of their total exports, 1990	30.8	26.9	31.3	51.2					

TABLE 35 Trade among developing countries

Source. UNCTAD secretariat projections.

only will trade deficits be reduced in the long run but also that their dependence on trade with the rest of the world will decline.

## E. The evolution of production by sector

The potential for trade patterns to evolve towards a more balanced structure characterized by increased trade among developing countries and decreased deficits in relative terms in the long run is underpinned by the growing importance of developing countries in world production in all sectors. Further, while the increased share of developing countries in world production is due to their relatively high rate of growth of GDP under this scenario, there are important shifts in shares among the sectors as well.

With respect to gross value added in agriculture as a percentage of GDP, all regions exhibit a decline, although there is much variation from region to region (see chart 19A and annex table B.2). On balance, the developing regions show a much stronger fall in value added in agriculture as a percentage of GDP than the developed countries, from 23 per cent in 1970 to 7.3 per cent in 2000. However, because of the higher overall rate of growth of GDP in developing countries, they would surpass the developed market-economy countries in terms of absolute production levels (see chart 20). The combination of sharply increased production shares in agriculture with a diminishing surplus on account of trade in food and beverages suggests the potential for strong increases in the demand for food associated with accelerating growth. (A closer examination of the implications for food production and trade is made in chapter 4 below.)

On the other hand, the share of manufactures in developing countries' GDP continues to rise throughout the simulation period, reaching about 27 per cent in the year 2000, as compared to 17 per cent in 1970 (see chart 19B). The importance of manufacturing value added in GDP for developed market economies also rises, but not significantly. As a result, by the year 2000 the share of these countries in world manufacturing value added would fall to about 40 per cent.

Production in developing countries has increased most markedly in the mining sector, accounting for 40 per cent of world output in 1960 against about 68 per cent in 1980, measured in 1975 prices. Over the simulation period their share in world production rises further, to about 87 per cent of the world total (excluding socialist economies for which completely comparable data are not available). In contrast, output in the rest of the economy, including transportation, utilities, construction and services, shows no regular pattern, remaining fairly stable as a percentage of GDP over the simulation period for both developing and developed market-economy countries. Of course, the developing countries' share in world production increases significantly, owing to their faster overall growth. This is hardly of importance in terms of the dynamics of the world economy as a whole, however, since these sectors are engaged primarily in the production of non-tradeable goods and services.

## F. Issues for consideration

The scenario presented above indicates that the developing countries would be launched on a growth path whereby their patterns of trade and production would be more sustainable in the long run. Several features of the scenario point to this promising conclusion. First, their overall trade deficit, while increasing sharply in the early 1980s, would begin to fall relative to their exports by 1990. Second, the composition of their exports would shift more rapidly away from a heavy dependence on primary commodity exports. Third, trade among developing countries would become an increasingly important factor in world trade, and more importantly, in the total exports of developing countries themselves. Fourth, the sheer weight of developing countries in world production and trade would make them significantly less susceptible to changes in the external economic environment. Fifth, and of great importance, the rates of output which would be achieved in the 1980s under this scenario would halt the present acceleration of non-agricultural unemployment and in the 1990s would make it possible to bring down those rates.

However, the requisite resource transfer to developing countries in the medium term becomes very large compared with the past. While, in relation to growth in developing countries the size of the resource gap would begin to decline towards the end of the 1980s, in relation to the much more slowly growing economies of the developed countries it would continue to rise. In any case the orders of magnitude involved would be beyond the capacity of existing financial mechanisms. There would thus be a situation in which there is a tendency to internal stability in the economies of developing countries themselves, but increasing strains and pressures in the international economy.

Yet, while a simple continuation of current growth trends in developing countries appears broadly consistent with the existing international economic

## CHART 19

Contribution of agriculture and manufacturing to gross domestic product in developing countries and developed market-economy countries, 1960-2000





system, it would not be consistent with likely internal developments in developing countries themselves. Another decade of rapidly increasing urban unemployment would entail very severe domestic social and political difficulties in those countries which would be difficult to contain. There thus appears to be a contradiction whereby, on the one hand, continued low growth for developing countries cannot be envisaged while, on the other hand, higher growth in those countries has unacceptable implications for the rest of the world.

From an analytical point of view, however, there are undoubtedly possibilities of reconciling these opposing forces. While a full enumeration of the relevant issues would be lengthy, the following would appear to be particularly relevant. First, the size of the requisite resource transfer to developing countries would depend very much on movements in their terms of trade. In this respect the decline in the terms of trade of raw materials relative to manufactures owing to slack world demand has added much to the total requirement.

Second, the initial faster growth of developing countries would inevitably require a large transfer of resources. Structural changes could not take place rapidly enough to obviate the need for such transfers in the medium term. The potential for increased global saving would appear adequate for the investment requirements of developing countries. However, the distribution of savings both within and among regions is very different from the distribution of investment requirements. Hence, new means of matching savings and investment patterns would need to be found. As a counterpart to financial flows, significant changes in expenditure patterns would need to take place, particularly in developed countries, in order to make available the real goods and services required by developing countries.

Third, the initial acceleration of growth would need to be followed by a comprehensive set of measures which would enhance the economic performance of developing countries so that their trade deficit in relation to their total exports can be reduced as rapidly as possible. In this context two areas call for special attention: increased trade among developing countries and a higher degree of import substitution. Import substitution is a natural outcome of the industrialization process and could become increasingly important as economies of scale associated with expanding market size came into play. With respect to increased trade among developing countries, ways and means would need to be found to further accelerate its growth. Positive trade policies would need to be complemented by substantially greater domestic saving rates, in order to achieve an exportable surplus. At the same time, increased access to the markets of developed countries could also play a role in diminishing transfer requirements. In this regard the current trend towards increased protectionism in the world economy, particularly against the exports of developing countries, would have to be sharply reversed.

Fourth, particularly in the 1990s and beyond, continued slow growth in the rest of the world will become increasingly inconsistent with buoyant international demand for resources. Growth in the developed countries will need to accelerate both to accommodate the increased demand and to ease the task of raising savings. It is possible that such a resumption of higher growth rates in developed countries would be stimulated by feedback effects which have been ignored in this analysis. However, such an induced recovery would occur only if the constraints currently holding down growth in the developed countries are dismantled through structural changes in the economy of these countries.

It is clear that a successful resolution of the problems hindering an effective acceleration of development programmes is a complex and difficult task. Solutions must be found simultaneously to the medium-term problems relating to resource transfers and the long-term problems of supportive structural change. On the other hand, the social, political and economic costs entailed by continuation of present international trends make that alternative unthinkable.

## Chapter 4

### IMPLICATIONS OF ACCELERATED GROWTH FOR SELECTED SECTORS

The projections discussed in the earlier chapters provide estimates of trade balances that may arise in the future under alternative development assumptions. This chapter examines in greater detail the implications of those projections in the areas of manufacturing, food and energy.

## A. World manufacturing and trade

Given the assumption of accelerated growth of GDP in developing countries, projections<sup>100</sup> for the manufacturing sector indicate that its contribution to their total GDP would reach 27 per cent in the year 2000 – a level attained by the developed countries in 1970 (see table 36). The developing countries' share in world manufacturing value added, which was 10 per cent in 1980, is projected to attain 23 per cent in the year 2000, a relatively close approximation to the 25 per cent Lima target. The share of the socialist countries in total world manufacturing value added is also projected to increase from a quarter to nearly one third. Developed market–economy countries, on the other hand, would experience a fall in their share from two–thirds in the 1970s to well below one–half in the year 2000.

These changes in shares imply that the manufacturing sector of developing countries would expand five-fold over the next 20 years, and that of socialist countries 2 1/2 times. In developed market-economy countries the sector would expand by about twothirds. Total manufacturing output of developing countries would, in the year 2000, reach the level achieved by the developed market-economy countries in the early 1970s.

# 1. Projected changes in world markets for manufactures

Important conclusions emerge from the aggregate projections presented above. First, the markets for manufactures of the socialist countries of Eastern Europe and Asia, in the 1980s, would be as large as those of developed market-economy countries in the 1960s. Large markets in manufacturing do not, however, necessarily imply high levels of trade in those products. In the case of socialist countries, the manufacturing sector has developed along lines of balanced growth with international trade, playing a rel-

#### TABLE 36

Manufacturing output (value added) for major economic groups, 1960-1980 and projections for 1990 and 2000

	1960	1970	1980	1990	2000
Value added					
(Millions US dollars					
at 1975 prices)		101			1.004
Developing countries .	49 533	101 942	218 1358	471	1094
DMEC <sup>a</sup>	119	283	572	958	1474
Total	701	1326	2150	3187	4819
		1520	2150	5167	4019
Contribution to GDP					
Developing countries .	13.4	15.7	19.7	22.7	26.8
	24.3	26.5	27.8	28.4	28.4
Socialist countries	24.6	30.7	36.7	40.8	42.4
Total	23.1	25.9	28.4	30.0	31.1
Share in world manufac-					
turing output (per cent)					
Developing countries .	6.9	7.6	10.2	14.8	22.7
DMEC <sup>a</sup>	76.0	71.1	63.2	55.2	46.7
Socialist countries	17.1	21.3	26.6	30.0	30.6
Total	100.0	100.0	100.0	100.0	100.0
		1960- 1970	1970- 1980	1980- 1990	1990- 2000
Average annual growth (per cent)	<u> </u>		<u> </u>		
Developing countries .		7.6	8.0	8.0	8.8
DMECa		5.9	3.7	2.6	2.6
Socialist countries		9.0	7.3	5.3	4.4
Total		6.6	4.9	4.0	4.2
Growth elasticity b	1				
Developing countries .		1.3	1.4	1.3	1.3
DMEC <sup>a</sup>		1.2	1.2	1.1	1.0
	1				
Socialist countries		1.4	1.4	1.3	1.1

Source. UNCTAD secretariat calculations.

<sup>a</sup> Developed market-economy countries.

<sup>b</sup> Defined as growth rate of value added relative to growth rate of GDP

atively minor role. Nevertheless, recent trends indicate that socialist countries may further increase their trade with other countries in both high-technology and capital-intensive products, especially in view of the projected constraints of their labour supply on growth.

The second conclusion which emerges from the projections is that developing countries' market for manufactures in the 1980s would reach the level attained by the developed market-economy countries in the post-war period. Developing countries have traditionally maintained relatively open economies and have traded a good part of their national production. This has been particularly true of many

<sup>&</sup>lt;sup>100</sup>The manufacturing growth rates are essentially derived from assumptions of sectoral growth elasticities. Average sectoral elasticities for the developing countries as a group appear to be close to the historical figures, while for developed countries sectoral elasticities are projected as falling gradually towards unity.

developing countries where strong emphasis has been placed on the rapid growth of labour-intensive industry.

While in the past manufactured exports of developing countries consisted mainly of labour-intensive products, projections for the 1980s and the 1990s clearly indicate that, as an inevitable corollary of the development and diversification of the industry of developing countries, new and sophisticated industrial products would figure prominently in the export list. This may be illustrated by the case of capital goods. During the 1970s, the capital goods industry in developing countries grew 40 per cent faster than total manufacturing.<sup>101</sup> However, partly because the capital goods industry started from a low base and partly because of the rapidly increasing investment requirements, the self-sufficiency ratio<sup>102</sup> remained stable (about 50 per cent) throughout the decade. If the growth of the capital goods industry in developing countries were to continue at past trends, this ratio would rise to about 60 per cent by 1990.103

As was noted in part III of this report, only a few developing countries have as yet established a capital goods industry of any importance. In view of the limited size of domestic markets, a continued and accelerated expansion of the industry would imply that a large proportion of the increased output would have to be exported. Since the majority of developing countries would remain net importers of capital goods, the prospects for trade in capital goods among developing countries themselves would appear to be very promising. Rough estimates indicate that the increment in total exports of capital goods from developing countries between 1980 and 1990 could well be of the order of \$150 billion (at 1980 prices) under the scenario of accelerated growth. On the assumption that a large part of these exports will be directed towards other developing countries, trade in capital goods among developing countries alone could well be twice the present level by 1990.

The projected trends for capital goods also have implications for the trade of developing countries with developed market-economy countries. In the past, 90 per cent of the developing countries' imports of capital goods came from the developed marketeconomy countries and made up about 10 per cent of the latter's total exports of manufactures. Because of the assumed increased growth differentials in GDP between developed and developing countries, there would be important changes in the structure of trade in capital goods. Thus, capital goods could account for more than a quarter of the increment in manufacturing exports by developed marketeconomy countries in the 1980s.

Important changes would also occur in the trade of other manufactured items. The demand for manufactured goods, and particularly capital goods, generated by faster growth in the developing countries, could be of such dimensions that it could boost the manufacturing output of developed marketeconomy countries<sup>104</sup> as well as accelerate trade among developing countries at unprecedented rates (see table 37). Of particular importance is the scope for increased trade in manufactures between deve-

### TABLE 37

Trade in and apparent consumption of manufactures by major economic groups, 1970, 1980, and projections for 1990

	(in	Value 1975 pric	res)		iual h raies
	1970	1980	1990	1970- 1980	1980- 1990
Exports from	(billi	ons of	US\$)	(per	cent)
Developing countries	24	60	217	9.9	13.6
	357	635	1057	5.9	5.2
Socialist countries	10	30	100	10.7	13.0
World	391	725	1374	6.4	6.6
Imports into					
Developing countries	76	213	646	10.8	11.7
DMEC <sup>a</sup>	298	474	667	4.8	3.5
Socialist countries	17	38	61	8.3	4.9
World	391	725	1374	6.4	6.6
Apparent consumption b					
Developing countries	255	590	1371	8.8	8.8
DMEC <sup>a</sup>	1825	2555	3126	3.4	2.0
Socialist countries	572	1152	1877	7.2	5.0
World	2652	4297	6374	4.9	4.0
Exports/value added	(Ratie	o in per	cent)	(Elasticity)	
Developing countries	23.4	27.9	46.0	1.2	1.7
DMEC <sup>a</sup>	37.9	46.7	60.0	1.6	2.0
Socialist countries	3.6	5.2	10.4	1.5	2.5
World	29.5	33.7	43.1	1.3	1.7
Imports/apparent consumption					
Developing countries	30.0	36.0	47.2	1.2	1.3
DMEC <sup>a</sup>	16.3	18.5	21.3	1.4	1.8
Socialist countries	3.0	3.3	3.2	1.2	1.0
World	14.7	16.9	21.5	1.3	1.7

Source UNCTAD secretariat calculations

<sup>a</sup> Developed market-economy countries

 $^{\rm b}$  Gross value of output plus imports minus exports. Gross value is assumed to be the double the value added

c Defined as the ratio between two percentage growth rates

loping and socialist countries. This is illustrated by the fact that the increment in the import demand of developing countries would be of the order of \$600 billion (at 1980 prices), with capital goods alone accounting for \$200 billion, while at present total

<sup>&</sup>lt;sup>101</sup>From United Nations, *Monthly Bulletin of Statistics*, May 1981, special table A, it can be estimated that the metal products industry in developing countries grew by 9.2 per cent annually in 1970–1972 compared to 6.5 per cent for all manufacturing industry. (The latter figure is lower than that in table 36 because of the difference in country coverage.)

<sup>&</sup>lt;sup>102</sup>Measured as the ratio of domestic production of capital goods to total fixed capital investment, excluding construction.

<sup>&</sup>lt;sup>103</sup>This implies an average annual rate of growth of 11 per cent for the capital goods industry during the 1980s.

<sup>&</sup>lt;sup>104</sup>The ratio of exports to value added for manufactures as a whole would increase from about 40 per cent in the 1970s to about 60 per cent in 1990. However, this possibly implies an unrealistically low level of domestic consumption. In order to meet both domestic requirements and projected exports, the manufacturing sector of developed market-economy countries may have to grow annually by 3.1 per cent rather than by the 2.6 per cent emerging from the scenario in the 1980s.

exports from the socialist countries barely exceed \$20 billion annually, of which \$5 billion represent capital goods.

As table 37 indicates, the accelerated rate of growth of total exports of manufactures from developing countries in the 1980s would be associated with a substantial change in the composition of their exports. While labour-intensive goods would continue to be an important export item, projections indicate that the 1980s could witness a rapid expansion of exports of petrochemicals from a number of oil-exporting countries and a dramatic rise in trade in capital and intermediate goods among the developing countries.

The shift towards specialization in exports of manufactures among developing countries, which first emerged in the late 1970s, would probably gain further momentum in the 1980s. Thus, there would be a pronounced shift to capital-intensive goods in the exports of the more industrialized of the developing countries, while new entrants into the world market would tend to concentrate on labour-intensive products. This shift should open up broader possibilities for trade in manufactures among developing countries on a more diversified basis.

## 2. Patterns of industrialization

In view of the differences in the initial positions of countries with regard to industrial development, the process of industrialization in the 1980s and 1990s will vary from one country to another. This is illustrated by the country based simulation exercise set out in table 38 which was based on the assumption that, over the next two decades, each developing country will move towards a 7 per cent rate of growth of GDP by a gradual acceleration of historical rates.

Semi-industrialized countries (where the manufacturing sector constitutes 15 to 25 per cent of GDP) accounted in the 1970s for one-half of the population of the developing countries and more than onethird of GDP as well as of manufacturing output. In the next 20 years, the number of countries in this category would remain roughly the same, but the country composition would change. As the countries entering the group are much smaller in size than those advancing to a higher stage of industrialization, the shares of the category of semi-industrialized countries to total GDP and to manufacturing output respectively would fall progressively over the projection period.

Fewer than 10 developing countries which, according to the classification used here, could be considered more industrialized in the 1970s, accounted by the end of that decade for nearly 30 per cent of the developing countries' GDP and nearly half of their manufacturing output, although their share of the population was not more than 10 per cent. The number of countries belonging to this group would increase rapidly in the next two decades, and by the year 2000 would account for about 60 per cent of GDP as well as of population

#### TABLE 38

GDP, manufacturing value added and population in developing countries classified according to share of the contribution of manufacturing to GDP in 1970 and 1980 and projections for 1990 and 2000<sup>a</sup>

	Frequency distribution (per cent)					
Category	1970	1980	1990	2000		
GDP						
Below 15 per cent	14.4	8.7	4.3	1.4		
15-25 per cent	40.7	33.5	21.9	6.2		
Above 25 per cent	18.7	29.2	42.5	58.9		
Oil-exporting countries	26.4	28.6	31.3	33.5		
Total	100.0	100.0	100.0	100.0		
Manufacturing value added						
Below 15 per cent	8.8	4.7	2.0	0.5		
15-25 per cent	46.7	34.0	20.0	4.3		
Above 25 per cent	33.1	46.4	60.8	75.4		
Oil-exporting countries	11.4	14.9	17.2	19.8		
Total	100.0	100.0	100.0	100.0		
Population						
Below 15 per cent	24.1	19.6	10.6	3.5		
15-25 per cent	53.0	52.5	52.4	14.3		
Above 25 per cent	8.0	12.8	21.6	66.6		
Oil-exporting countries	14.9	15.1	15.4	15.6		
Total	100.0	100.0	100.0	100.0		

Source: 1970-1977: National accounts data of the United Nations covering a sample of 94 countries by the Department of International Economic and Social Affairs. GDP growth from 1978 onwards is assumed to approach 7 per cent at a rate of 0.15 percentage points per year. The growth rate of manufacturing is based on the elasticity e = 2.4473 - 0.1636 ln y where y = income per capita in US dollars at 1975 prices.This function is derived from a transformation of data in*Restructuring of world industry — New dimensions for trade co-operation. Report by the UNCTAD secretariat*(TD/219),United Nations publication, Sales No. E. 71.6L.D., table 1.*Oil-exporting countries*agrowth elasticity of 1.3 is assumed and a terms-of-trade gain from oil resulting in 1 percent growth of GDP per year more than by application of the 0.15 percentage points.

<sup>a</sup> Countries move over time between the categories according to their share of manufacturing in GDP in the year indicated with the exception of the oil-exporting countries, whose classification remains the same throughout the period. (The latter are not included in the first three categories irrespective of their shares of manufacturing in GDP.)

and as much as three-quarters of the manufacturing output of developing countries.

With regard to the oil-exporting countries, the pattern emerging, if the oil sector is excluded, follows that of other developing countries and, by the year 2000, the structure would be similar to that of the more industrialized countries.

In terms of number of countries, however, the pattern would differ somewhat. In the 1970s the manufacturing sector in the majority of developing countries accounted for less than 5 per cent of GDP. These countries had a fifth of the population of developing countries as a whole, but their contribution to the total GDP and manufacturing output was less than 10 per cent. A large number of them would enter the category of semi-industrialized countries over the next two decades. Yet in a significant number of countries, consisting of small countries in Africa and some small island countries, the share of the manufacturing sector in their GDP would not exceed the 15 per cent benchmark, even though their GDP growth is projected as approaching the 7 per cent target over the next two decades.

In sum, if fast growth prevails, the first generation of industrializing developing countries which emerged in the last two decades would be followed in the next two decades by a second generation of about 30 developing countries, comprising altogether half of the developing world population. Progress along these lines would lead to a reduction of the developing countries' dependence upon growth originating in developed market-economy countries and would contribute to a more balanced distribution of world production and trade. The changes involved, however, are of such magnitude and scope that it would probably not be possible to accommodate them within the existing international arrangements in the areas of trade, money and finance and new measures would be called for to deal with these new problems.

Finally, even with accelerated growth, a large number of developing countries would not experience decisive gains in industrialization before the turn of the century. These countries would not account for a very large proportion of the total population of the developing countries, perhaps less than a fifth by the year 2000. The number of people living under these conditions would nevertheless be large, of the order of 600–700 million.

## **B.** World food prospects

The aggregate projections presented earlier in this report touched upon certain global aspects of supply and demand in respect of food. The present section considers this subject in more detail.

In the light of the assumptions made concerning the growth of income and population, the world model, which was discussed earlier in this part of the report, implies a rate of growth of world demand for food of the order of 2.2 per cent per annum during the 1980s and of 2.4 per cent per annum in the 1990s.<sup>105</sup> Several studies concerning food production potential suggest that there are no insuperable obstacles to achieving output increases of this size.<sup>106</sup> In particular, there appears to be immense scope for increasing yields through better land use and greater inputs of fertilizer.

While, at the global level, demand for and supply of food may be balanced, the regional implications of the global projections point to the possibility of large disequilibria. Thus, demand for food in the developing countries is projected as growing at a rate of 3.5 per cent per annum, whereas it increased in the past (1960–1980) at the rate of 2.7 per cent per annum.

The prospects for significant productivity gains in the food production of developing countries are very promising, but technical studies<sup>107</sup> on the subject indicate that, even under optimistic assumptions, domestic production will not be able to meet the projected substantially increased requirements. Consequently, their gross cereal imports may have to increase significantly in the next 20 years, although as a proportion of projected total expenditures for imports of cereals they would account for about 2.5 per cent toward the end of this century, as compared with 3 in the past. To be sure, the additional financing required for such imports would impose a significant but not, in itself, an impossible burden.

Another implication of the projections is that developing countries would probably increase their dependence upon world markets for the provision of foodstuffs. On average, their projected cereal deficit may amount to as much as 20 per cent of consumption, and for some countries it may be much larger. It is likely therefore that developing countries would be required to take special measures to reduce their dependence upon foreign markets as a way of improving the security of supplies.

Measures that may be considered in this connexion include the establishment of a common cereal stock for all developing countries. To be effective, such a stock may have to amount to one year of normal food imports.<sup>108</sup> Nevertheless, the amounts involved would be one-half of those required if, instead, each developing country were to establish a national stock. In addition, it appears that there is significant scope for increasing trade in cereal among developing countries. Projections prepared by FAO, for example, indicate that one-third to one-half of gross cereal imports by developing countries, instead of the present 2 per cent.

The projected estimates of import requirements, therefore, may err on the high side. In addition, and perhaps more importantly, the projections do not take fully into account the possibility of an improvement in the real price of cereals and its impact on domestic production. Recent studies indicate that grain prices may not continue to fall and may improve in relation to the prices for other agricultural commodities.

The prospects for food production will vary among the different developing countries. In the first instance, developing countries that are net exporters of cereals will almost certainly respond to an improvement in real prices by increasing their levels of output and exports beyond those implied in the projections. Countries that have allowed production of foodstuffs to decline relative to other output may experience a reversal of this trend in the future, as a result either of policies to increase self-sufficiency in foodstuffs or of changed economic conditions. This is likely to be true of oil-exporting developing countries, whose cereal deficit may decline somewhat in

<sup>&</sup>lt;sup>105</sup>These estimates imply a world income elasticity of demand for food of 0.23.

<sup>&</sup>lt;sup>106</sup>See, for example, U.S. Council on Environmental Quality, *The Global 2000 Report to the President Entering the 21st Century:* A report prepared by the Council on Environmental Quality and the Department of State, Washington, D.C., 1980, 3 volumes.

<sup>&</sup>lt;sup>107</sup>See, for example, FAO, Agriculture: Toward 2000 (C/79/24), July 1979.

<sup>&</sup>lt;sup>108</sup>The method used to arrive at this estimate is the following. Net imports were calculated as the difference between exponentially growing consumption and the actual output each year in 1966–1980. Normal imports were estimated by applying a quadratic function to the net imports. The stock was estimated as the minimum needed in the first year to cope with the yearly deviations of net imports from a normal import level during the whole period.

the future. Moreover, middle-income developing countries that experienced cereal deficits in the past may find it advantageous to allocate additional resources to domestic food production in the future. These countries have already established a significant industrial base which has helped directly or indirectly to raise agricultural productivity.

Developing countries that have experienced an overall agricultural export surplus and a cereal deficit in the past may shift to import substitution of cereals if the terms of trade of cereals and other agricultural products move in favour of the former.

A number of developing countries are self-sufficient in cereals. In so far as such cereals are produced in these countries in the subsistence sector, changes in real cereal prices would not affect the projections. However, when cereals are also produced in the monetized sector of the economy, any improvement in the real prices of cereals may induce higher levels of production than those projected. In such cases, imports of fertilizer will increase beyond the levels implied in the projections, since one-half of the fertilizer consumed in developing countries is imported. To reduce excessive dependence on imports, it will then be necessary to make sizeable investments in the domestic fertilizer industry. A substantial enlargement of capacity is indeed possible, especially in the case of nitrogenous and phosphate fertilizers, for which the raw materials (oil and phosphate rock) are largely in the developing countries themselves, whereas their processing takes place, at present, in developed countries.

While the majority of developing countries are likely to be able to cope with the projected increases in the demand for food, either through increased domestic production or through imports, a number of low-income developing countries<sup>109</sup> will find it difficult to do so. In the first instance, their economic situation will prevent them from meeting projected increases in requirements through commercial imports. Moreover, the prospects for expanding domestic production are not very promising; at best, they will not be able to improve agricultural productivity significantly, at least over the medium term.

Many of these countries are ecologically fragile. They are more exposed than others to fluctuations in the weather and are often the first victims of longerterm changes in the climate. For example, developing Africa could have three times more land under intensive cultivation than it has at present but the potentially arable areas are to a great extent the same as those threatened by desertification. The process of desertification is partly man-made, but the long-term climatic waves of change in average temperature are the main determinants. Despite all the research work in this area, uncertainty prevails concerning the future direction of climatic waves.<sup>110</sup> It is obvious that these countries need sustained aid over long periods of time to avert degradation or even stagnation in the levels of per capita consumption. Aid would also be needed to ensure food imports in years of crop failure as well as to secure a minimum nutritional standard in the poorest population groups.

## C. Energy requirements

## 1. General assessment

Under the scenario of accelerated growth in developing countries presented in chapter 3 of this part, the projected trade imbalances with regard to energy would be very large. The present section provides an analysis of the key factors most likely to affect energy requirements and in particular their implications for the related foreign exchange and investment requirements. This section is based on work that has been carried out by the UNCTAD secretariat on the assessment of energy and energyrelated investment requirements.<sup>111</sup>

For the developed countries, the oil price increases in the early 1970s have led to limited conservation and stock management rather than immediate recourse to investment in alternative sources of energy, in improvements of the efficiency of the energy sector and in oil substitution. This is partly because the application of new investment projects takes time to mature and partly because the commitment of large funds to risky investments calls for greater certainty over the longer term as regards relative prices of different forms of energy and energy prices in general. Moreover, the capital cost of developing alternative sources of energy has also been increasing. For example, the unit investment costs of nuclear energy, contrary to expectations, have been rising steadily, mainly because of modifications necessitated by the adoption of additional security regulations. The extraction of fossil fuels also calls for progressively higher unit investment costs as it shifts to lower quality deposits and less accessible areas. There is now general agreement that the real price of oil will continue to rise. Consequently, countries depending significantly on oil imports will need to make much larger investments in their energy sector than in the past if they are to reduce dependence on energy imports.

Both the developed market-economy countries and the socialist countries of Eastern Europe envisage significant increases in their energy investments during the period 1979-1990. According to one estimate,<sup>112</sup> the share of supply-related energy investments to GDP of Western Europe will rise from the current level of 1.3 per cent to 1.8 per cent in North America from 2.3 per cent to 3 per cent (of GNP) and in the socialist countries of Eastern Europe from 4 per cent to 4.5 per cent (of the net material product). The share of total energy-related investments

<sup>&</sup>lt;sup>109</sup>The countries falling into this category are more than 30 in number and account for more than 10 per cent of the food consumption of the developing countries.

<sup>&</sup>lt;sup>110</sup>This is reflected in the report referred to in footnote 106 above which gives several scenarios without taking a position as to which one is the most probable. Some of these scenarios foresee the further spread of desertification.

<sup>&</sup>lt;sup>111</sup>The result of this work will be published in a forthcoming study by the UNCTAD secretariat.

<sup>&</sup>lt;sup>112</sup>ECE, Energy investment prospects to 1990 in the ECE region (EC.AD (XVII)/R.5), September 1980.

would be even higher if investments in conservation were to be included. Nevertheless, it appears that, even though the changes in the magnitudes of energy investments may give rise to some problems of resource allocation and financing, especially in North America and the socialist countries of Eastern Europe, these problems could be resolved at the national level or through existing international arrangements (recourse to international money markets, or international agreements on energy cooperation).

Developing countries will face more serious problems than developed countries in adapting to the new energy situation. The cost of meeting their energy requirements is expected to increase more rapidly in relation to GDP growth than for developed countries because of faster growth of commercial energy demand in relation to such growth. The income elasticity of commercial energy demand (increase in energy demand in relation to GDP growth) at present significantly higher than unity in developing countries, is expected to remain high.<sup>113</sup> For example, in the 1980 revised long-term energy projections of the World Energy Conference, 1980, the implied income elasticity of energy demand for the developing countries is 0.9 compared with 0.6 for the developed market-economy countries and socialist countries of Eastern Europe.114 It appears, however, that for a better understanding of the energy potential of developing countries the analysis should go beyond overall relationships.115

The options available to developing countries imply significantly different investment and foreign exchange requirements. Many developing countries

<sup>115</sup>Energy requirements are expressed in terms of useful energy (heat for cooking, or smelting metal, mechanical force for transport and industry, lighting etc.,) while energy supplied to meet these requirements comes in the form of primary energy i.e., the amount of energy contained in the various forms or products as they are found in nature. Since energy is not always consumed in its original form but undergoes various transformations in which a good part of the original energy is lost, the practical possibility for a given source of primary energy to meet a need for useful energy depends on both the technical and the economic efficiency of the energy path selected. For as long as petroleum remained the cheapest, as well as the most versatile of energy sources there was no urgent need for optimization of the mix of the primary energy sources employed and the transformation paths chosen to satisfy a given demand for useful energy. Increases in petroleum prices, with their consequences for the prices of other primary energy sources, have now reversed the previous situation. Hence, optimization of the primary energy mix and of the technical efficiency of the various paths appear to be of considerable importance.

will face particular difficulties in financing investments if they adopt energy systems similar to those prevailing in developed countries, which are mainly based on centralized systems (electricity grids and piped gas) and on imported oil. Some developing countries, for instance, could not benefit from the economies of scale inherent in centralized systems.<sup>116</sup> Furthermore, countries with low population density have to face comparatively higher costs if energy is distributed through centralized systems.<sup>117</sup>

Another aspect of the developing countries' energy requirements is that they have a high foreignexchange component. On the one hand, investment in energy has a very high import content because most of the available technologies are imported. On the other hand, much energy consumed in the developing countries has to be petroleum-based, even at higher real prices, because of its versatility, ease of transport and minimum infrastructure requirements. This will continue to be so in the future, but petroleum resources in the net importing regions themselves will be tapped to a much greater extent than at present.

Furthermore, the developing countries will continue to depend partly on oil to meet the needs of their rural populations, which face what has become known as the "second energy crisis". Non-commercial forms of energy, such as animal dung, agricul-tural wastes and, above all, fuelwood provide a sizeable share - estimated variously at 30 to 40 per cent of total energy demand. The use of such fuels, which are the chief source of household energy in many poor rural areas, has expanded considerably, along with the increase in the population living in those areas. As a consequence, there has not only been an upsurge in the prices of wood and charcoal throughout most of Asia, Africa and Latin America, but also an increase in the degradation of forests and an extension of desertification. To put an end to this deterioration of the environment, which has serious consequences, the developing countries, even if they considerably improve the management of forests and other sources of non-commercial energy and make more efficient uses of non-commercial fuels, will have to substitute alternative energy resources for non-commercial forms. Although "new" forms of energy, such as solar and minihydro, may play an important role and although peat and coal (when locally available) may be used in certain countries, petroleum (LPG, gasoline, kerosene) will have to provide part of the substitute fuels in rural areas.

For the reasons mentioned above, the share of oil in total energy demand will continue to increase in developing countries. This is also one of the main conclusions of the World Energy Conference 1980, which has projected that oil consumption in these countries will reach 1.9 billion tons of coal equivalent (Gtce) in the year 2000. This corresponds to 42

<sup>&</sup>lt;sup>113</sup>Historically, the relationship between demand for energy and the level of economic activity has been expressed by the income elasticity of energy demand. On average, countries at lower levels of economic development tended to show a high energy demand elasticity in relation to income, which started declining as these countries became industrially "mature".

<sup>&</sup>lt;sup>114</sup>In the proceedings of the World Energy Conference (WEC) 1980 which will be published in the near future, projections are for the period 1976-2020 and cover both commercial and noncommercial energy. The total energy demand growth rate for the developing countries is estimated at 4.2 per cent per annum. Even at this rate, however, per capita energy demand in these countries at the end of the period would only be approximately one-fourth that of the developed market-economy countries.

<sup>&</sup>lt;sup>116</sup>Unit investment cost of electricity generated in thermal plants is a decreasing function of plant size. Unit costs increase considerably for plant sizes below 200 megawatt.

<sup>&</sup>lt;sup>117</sup>Investment in secondary networks and transmission equipment may in some cases amount to 70 per cent of total energy investment.

per cent of total energy demand as compared with 34 per cent in 1976.<sup>118</sup>

## 2. Projections of energy balances, investment and foreign exchange requirements

The projections shown in table 39 are based on the assumption that the GDP in developing countries will grow at a rate consistent with the objectives of the Third United Nations Development Decade.<sup>119</sup> Two alternative projections are provided which are based on different assumptions regarding the pattern of development and the energy systems that might be adopted by the developing countries.

#### TABLE 39

Developing countries: projected energy demand and supply balances in the year 2000 (Billions of tons of coal equivalent)

	1073		00 ctions
	1973 (actual)	Scenario A	Scenario B
Useful energy demand		1.7	1.6
Final energy demand		3.7	3.1
Primary energy demand	0.9	5.1	4.0
of which: Non-commercial energy Non-renewable sources. Oil	0.3 0.6 0.4	0.6 4.2 2.4	0.5 2.9
Gas	0.1	0.7	0.7
	0.1	0.8	0.7
	0.0	0.3	0.1
Renewable sources	0.0	0.3	0.5
Hydroelectric	0.0	0.2	0.2
Biomass	0.0	0.0	0.1
	0.0	0.0	0.1
	0.0	0.0	0.1

Source: UNCTAD secretariat estimates.

Note: For scenarios A and B see the text. For definitions of "useful demand", "primary demand" and "final demand" see footnotes 115 and 121.

Turning first to the variables reflecting the patterns of development,<sup>120</sup> it can be seen that, on the assumption that structural change in the developing

<sup>118</sup>According to the World Energy Conference projections (*op. cit.*), the share of oil in commercial energy consumption will decrease from 58.6 per cent in 1976 to 53.6 in the year 2000. Using data given in the *Yearbook of World Energy Statistics, 1979*, (United Nations publication, Sales No. E/F.80.XVII.7), and following the WEC assumptions, the above share would be 66.9 per cent for 1976 and 61.9 per cent for 2000. Similarly, oil consumption as a proportion of total energy consumption would increase from 39 per cent to 48 per cent in the period 1973-2000.

<sup>119</sup>The projections are for the year 2000 starting from the situation in 1973. The longer-term perspective taken in such a long time horizon is necessary because the energy sector is characterized by long lead times (about 10 years normally elapse between a decision to build a nuclear plant and its entry into operation). If account is taken of actual growth rates in the period 1973–1980 and of a subsequent period of adjustment to the target rate by 1990, the implied average annual rate for the period 1973–2000 is 6.3 per cent.

<sup>120</sup>The quantity of (useful) energy necessary to produce a unit of national product varies considerably from one sector to

#### TABLE 40

Developing countries: projected final energy demand by end-use <sup>a</sup> in the year 2000

(Millions of tons of coal equivalent)

	Scenario A	Scenario B
Agriculture	158	244
Manufacturing	1382	1083
Energy-intensive industries	1128	822
Transport	859	671
Services	55	49
Households	1207	1062
Tota]	3661	3109

Source: UNCTAD secretariat estimates.

Note: For scenarios A and B see the text.

<sup>a</sup> Energy inputs into various sectors of production and final demand by households.

countries will follow a pattern similar to that of industrialized countries in the past, the demand for useful energy in the year 2000 may reach 1.7 Gtce (scenario A). On the alternative assumption (scenario B) that domestic production is more oriented towards satisfying the demands of the local population, which implies (a) a slightly slower growth rate for manufacturing as a whole but a significantly slower rate for energy-intensive industries; (b) higher growth for agriculture and construction; and (c) a lower degree of urbanization, the demand for useful energy may be reduced to 1.6 Gtce, or by 6 per cent as compared with scenario A. If, in addition, account is taken of the potential for improving the efficiency of the end-use devices (e.g. of stores, cars, water boilers, etc.) and of the extent to which the industrial structure allows for utilization of energy forms that have higher end-use device efficiency, the difference in the final energy demand in the year 2000<sup>121</sup> between the two sets of projections becomes 15 per cent. The major divergences are in the transport sector (see table 40), where demand is 22 per cent lower on the assumption of a lower level of urbanization, and in energy-intensive industries, where demand is 27 per cent lower on the assumption of slower growth for this sub-sector.

The pattern of development may also affect the demand for primary energy.<sup>122</sup> An even more

<sup>121</sup>Energy demand including the losses of end-use devices is known as *final energy* demand. It is the form of energy as it arrives at the door of the final consumer, i.e., an intermediate form between the primary and the useful energy described above. It is a more convenient measure for comparing different energy estimates.

<sup>122</sup>The structure of useful energy demand may be affected by the sectoral or subsectoral composition of production in a manner that enhances the possibilities for the development of alternative

another in both developing and developed countries. The transportation sector, for example, is not only one of the most energyintensive sectors but is also almost entirely dependent on petroleum. Industrial structure is another important factor in determining the level and the structure of (useful) energy demand. The higher the share of energy-intensive industries (metals, cement, chemicals, paper, etc.) in the total, the higher the energy demand of industry as a whole.

important factor in determining demand for primary energy is the choice of energy strategies. This choice critically affects the level of investment and foreign exchange requirements. For example, a centralized system based on electricity uses more primary energy than a system less dependent on electricity, owing to greater losses in energy conversion.<sup>123</sup>

In projecting the corresponding primary energy demand, a general assumption is made concerning imports of oil. For each developing region projected demand imported for oil is constrained by limiting the value of imports to 10 per cent<sup>124</sup> of total GDP (extractive industries excluded) for scenario A and 5 per cent for scenario B.125 The remaining assumptions about the choice of energy strategies are in line with the assumptions about economic policies. In scenario A, it is assumed that the choice of an energy system similar to the one already established in developed countries is compatible with similar assumptions regarding the overall pattern of development. In this scenario, more emphasis is given to network electricity and the conventional sources of energy in general. Oil is substituted for fuelwood and there are no specific policies to alleviate the fuelwood problem. The primary energy required to meet the needs of useful energy for the year 2000 would be 5.1 Gtce and the average annual growth rate for the whole period 1973-2000 is 6.6 per cent. For scenario B, it is assumed that the choice of energy strategies leading to the optimization of the overall technical efficiency of the energy system, the development of domestic resources and the reduction of imports is more in line with economic policies that aim mainly at the satisfaction of domestic needs. In specific terms this assumption is translated into greater utilization of domestic oil and other conventional sources, reduction in the import content of capital goods (by developing domestic technologies), greater exploitation of new and renewable sources of energy and improvement of efficiency in the utilization of fuelwood. The resulting primary energy required for satisfying the demand for useful energy is, in scenario B, projected to be 4.0 Gtce in the year 2000, which corresponds to a growth of 5.7 per cent a year for the whole period 1973-2000.

sources and thus the primary energy mix. For example, if a higher proportion of value added comes from industries requiring low and medium temperature, then solar energy at its present state of development could make a larger contribution to the primary energy mix.

<sup>123</sup>The efficiency with which oil or coal is transformed into electricity is approximately 30 per cent (i.e. there is a 70 per cent loss). Electricity supplies, especially in developing countries, would have to depend on thermal as well as nuclear and hydro generation.

<sup>124</sup>While it is not possible to separate the group of oil-producing countries or the major oil exporters, seven regions would be net oil-importers in the year 2000 if the value of their energy imports is assumed to reach 10 per cent of their GDP (excluding extractive industries).

<sup>125</sup>The level of imports at which an optimal balance is achieved between investments in domestic oil and imports should be determined through a dynamic model in which the feedback from added investment would be explicitly included. However, this was not possible in the present study. Hence, for the same overall economic growth, projected energy requirements of developing countries may vary in the year 2000 between a high 5.1 Gtce and a low of 4.0 Gtce, implying for scenario B an overall improvement of 23 per cent over scenario A in the performance of their energy system. The most noteworthy differences between the two projections are the lower demand for oil and the increased contribution of new and renewable sources of energy (apart from hydroelectric power) in scenario B. The contribution of nuclear energy to total primary energy consumption, which is small in scenario A, becomes insignificant in scenario B.

The reduction in the demand for oil in scenario B has the effect of making most of the regions self-sufficient in oil. Only three regions continue to be net oil-importers. In these regions the unsatisfied demand is met by substituting other domestic sources of energy for imported oil.

The investments<sup>126</sup> required by the developing countries to meet their projected domestic energy demand in the year 2000 (see table 41) would range from \$97 billion and \$156 billion at 1973 prices or

#### TABLE 41

#### Developing countries: energy-related costs and associated foreign exchange requirements in the year 2000 (Billions of US dollars at 1973 prices)

Buillons of US dollars at 1	19/3	prices)
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	Scen	ario A	Scen	ario B
	Total	of which: foreign exchange require- ments	Total	of which: foreign exchange require- ments
Investments				
Fossil fuels	37.2	18.6	23.3	9.3
Electricity <sup>a</sup>	115.9	66.5	61.2	27.0
Thermoelectric	20.8	9.3	7.0	2.6
Hydroelectric	13.0	6.5	27.8	11.1
Nuclear	48.7	39.0	13.4	9.7
Transmission and dis- tribution Non-commercial and new and renewable	33.4	11.7	13.0	3.6
sources	3.0	0.9	12.3	2.6
Total investments	156.1	86.0	96.9	38.9
(% of GDP) <sup>b</sup>	(7.3)	(4.9)	(4.5)	(1.8)
Net energy import require-				(=)
ments	103.8	103.8	38.1	38.1
(% of GDP) <sup>b</sup>	(4.8)	(4.8)	(1.8)	(1.8)
Total energy sector				(
requirements	259.9	189.8	135.0	77.0
(% of GDP) <sup>b</sup>	(12.1)	(8.8)	(6.3)	(3.6)

Source. UNCTAD secretariat estimates.

Note · For scenarios A and B see the text.

a Production, transmission and distribution.

<sup>b</sup> The percentage is expressed in terms of GDP excluding the extractive industries.

<sup>&</sup>lt;sup>126</sup>These estimates refer to investments required for meeting domestic demand only. Investments to increase exports to developed countries are not included here, but investments by certain oil-producing countries to cover the exports to other developing countries are included.

from 4.5 per cent to 7.3 per cent of GDP (excluding the extractive industries). Hence, developing countries may have to devote a considerably larger share of GDP than at present<sup>127</sup> to investments in the energy sector. Even on the assumption of lower energy demand (scenario B) the share of projected investment in total GDP (excluding the extractive industries) will be higher than in the developed countries. Financing energy investments will be a major challenge for most developing countries.

The projections also imply a very high level of foreign exchange expenditure, which would place serious pressure on the balance of payments for several developing countries. The projected foreign exchange requirements of the energy sector as a whole<sup>128</sup> could range between 3.6 and 8.8 per cent of GDP in the year 2000. In contrast, the foreign exchange requirements for energy imports could range between 1.8 and 4.8 per cent of GDP. It should be noted, however, that the former share of energy imports was achieved by limiting *a priori* the demand for oil and by emphasizing the development of energy supplies based on domestic sources. It should be stressed that while the above policies may contribute to reducing the pressure of the energy sector on the economies of developing countries as a whole to a more manageable degree, serious disequilibria will continue to exist in some regions of the world.

<sup>&</sup>lt;sup>127</sup>For the period 1968–1973, energy investments in net oilimporting developing countries were 1.2 per cent of total GDP. According to a World Bank paper entitled *Rural Electrification* published in 1975, this share was expected to increase to 1.4 per cent in the period 1974–1980.

<sup>&</sup>lt;sup>128</sup>Total foreign-exchange requirements are equal to the import content of investments in all regions plus the value of imports for the net oil-importing regions on the basis of a price for oil in the year 2000 of \$36/bbl at 1973 prices.

# Annex A

# SUPPLEMENTARY STATISTICS

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## I. Classification of countries and territories used in this report

Unless otherwise indicated, the following classification of countries and territories has been used in this report. It has been adopted for the purposes of statistical convenience only and does not necessarily imply any judgement concerning the stage of development of a particular country or territory:

Developed market-economy countries: Australia; Austria; Belgium; Canada; Denmark; Faeroe Islands; Finland; France; Germany, Federal Republic of; Greece; Iceland; Ireland; Israel; Italy; Japan; Liechtenstein; Luxembourg; Netherlands; New Zealand; Norway; Portugal; South Africa; Spain; Sweden; Switzerland; Turkey; United Kingdom; United States.

Socialist countries of Eastern Europe: Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania, USSR. Socialist countries of Asia: China, Democratic People's Republic of Korea, Mongolia.

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Developing countries and territories: all other countries and territories not specified above.

Generally speaking, sub-groupings within geographical regions are those used in the UNCTAD Handbook of International Trade and Development Statistics, Supplement 1980.<sup>129</sup> However, South Asia includes Afghanistan, Bangladesh, Burma, India, Nepal, Pakistan, Sri Lanka, and East Asia includes all other countries in South and South-East Asia as well as countries in Oceania. In general, data for the People's Republic of China exclude Taiwan Province.

<sup>&</sup>lt;sup>129</sup>United Nations publication, Sales No. E/F.80.II.D.10 and corrigendum.

Major oil-exporting developing countries are defined as those countries for which petroleum and petroleum products accounted for more than 50 per cent of their total exports in 1974. These countries are: Algeria, Angola, Bahrain, Brunei, Congo, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libyan Arab Jamahiriya, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, United Arab Emirates and Venezuela.

Non-oil exporting developing countries are all developing countries and territories other than the major oil-exporting developing countries.

Net oil-importing developing countries are the "non-oil exporting developing countries", excluding the following eight net oil exporters: Bolivia, Egypt, Malaysia, Mexico, Peru, Syrian Arab Republic, Tunisia and Zaire.

*Exporters of manufactures* are developing countries with a per capita income greater than \$1,000 in 1977, and whose exports of manufactures averaged more than 20 per cent of total exports during the period 1970–1977 and grew in volume at an average annual rate of more than 8 per cent during those years. The countries included in this group are Argentina, Brazil, Republic of Korea, Singapore, Uruguay and Yugoslavia, and certain territories such as Hong Kong.

The 30 least developed countries are:<sup>130</sup> Afghanistan, Bangladesh, Benin, Bhutan, Botswana, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Democratic Yemen, Ethiopia, Gambia, Guinea, Haiti, Lao People's Democratic Republic, Lesotho, Malawi, Maldives, Mali, Nepal, Niger, Rwanda, Samoa, Somalia, Sudan, Uganda, United Republic of Tanzania, Upper Volta, Yemen.

Most seriously affected countries (MSAs): Afghanistan, Bangladesh, Benin, Burundi, Cape Verde, Central African Republic, Chad, Democratic Kampuchea, Egypt, El Salvador, Ethiopia, Gambia, Ghana, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, India, Ivory Coast, Kenya, Lao People's Dem. Rep., Lesotho, Madagascar, Mali, Mauritania, Mozambique, Nepal, Niger, Pakistan, Rwanda, Samoa, Senegal, Sierra Leone, Somalia, Sri Lanka, Sudan, Uganda, United Republic of Cameroon, United Republic of Tanzania, Upper Volta, Yemen and Democratic Yemen.

### **II. Estimates and projections**

The terms-of-trade calculations for groups of developing countries and territories have been made by the UNCTAD secretariat using a methodology briefly described in the UNCTAD Handbook of International Trade and Development Statistics, Supplement 1980.<sup>131</sup>

The short-term projections shown in Part I of the report have been prepared by the UNCTAD secretariat on the basis of recent forecasts of Project LINK and econometric models covering 60 developing countries,<sup>132</sup> and of consultations with experts.<sup>133</sup>

## III. Specific notes on annex tables A.11-A.13

## 1. Methodology

The figures in annex tables A.11-A.13 are based on national data for physical volumes of production, exports and imports relating to 26 commodities, provided by the FAO project "Agriculture": Towards 2000". The commodity aggregates were constructed by using average world market prices in 1974-1976 as weights for the following: cereals (including wheat, rice, maize, barley and other cereals), other food (roots, sugar, pulses, vegetables, bananas, citrus fruits, other fruit, vegetable oils, cocoa, coffee, tea, tobacco, beef and veal, mutton and lamb, pigmeat, poultry meat, milk and eggs) and agricultural raw materials (cotton, jute and rubber). Consumption was computed as production plus imports minus exports (information on changes in stocks was not available). Price movements were obtained by valuing individual commodity volumes at world market prices and dividing the values thus obtained for each commodity group by corresponding volumes in 1974-1976 prices. Population data were taken from the FAO Production Yearbook (extrapolated by an exponential trend for years not available in the data base).

## 2. Country classification

Oil exporters: Algeria, Angola, Bahamas, Bahrain, Bermuda, Brunei, Gabon, Indoensia, Iran, Iraq, Kuwait, Libyan Arab Jamahiriya, Mexico, Netherlands Antilles, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, United Arab Emirates, United States Virgin Islands, Venezuela.

Agricultural surplus countries: countries or territories with net exports of agricultural products other than cereals that are at least double their net imports of cereals (in order to take account of transport costs and imported inputs): Botswana, Brazil, Belize, Burundi, Central African Republic, Colombia, Costa Rica, Cuba, Cyprus, Dominica, Dominican Republic, Ecuador, El Salvador, Equatorial Guinea, Fiji, Gaza Strip, Ghana, Guatemala, Honduras, Ivory Coast, Liberia, Madagascar, Malaysia, Mauritius, Mozambique, Namibia, New Hebrides, Nicaragua, Panama, Papua New Guinea, Paraguay, Phi-

<sup>132</sup>For a brief description of Project LINK and these econometric models, see TD/B/C.3/134/Add.1, section II. The UNCTAD secretariat contributes to this world econometric modelling system regional models of developing countries and price forecasts for their principal export commodities.

<sup>&</sup>lt;sup>130</sup>Data for least developed countries do not include Guinea-Bissau, which was added to the list of least developed countries in July 1981.

<sup>&</sup>lt;sup>131</sup>**Op**. cit.

<sup>&</sup>lt;sup>133</sup>Experts from a number of developing and developed market-economy countries, together with representatives of multilateral institutions, participated in consultations held by the Secretary-General of UNCTAD on the world economic outlook for 1981-1982 in January 1981.

lippines, Rwanda, St. Kitts-Nevis-Anguilla, Samoa, Sao Tome and Principe, Solomon Islands, Sudan, Togo, United Republic of Cameroon, United Republic of Tanzania, Zaire.

Countries self-sufficient in cereals: countries with a self-sufficiency ratio for cereals of over 95 per cent: Afghanistan, Argentina, Bhutan, Burma, Chad, Democratic Kampuchea, Ethiopia, Guyana, India, Kenya, Malawi, Mali, Nepal, Pakistan, Suriname, Thailand, Turkey, Uganda, Uruguay, Zimbabwe.

Other developing countries: developing countries or territories not included in the preceding groups:

(a) GDP per capita in 1977 above \$500: Barbados, Bolivia, British Virgin Islands, Chile, Cook Islands, French Guiana, French Polynesia, Djibouti, Greenland, Guadeloupe, Guam, Hong Kong, Jamaica, Macau, Malta, Martinique, Monserrat, Morocco, New Caledonia, Pacific Islands, Peru, Republic of Korea, Reunion, Saint Lucia, St. Pierre and Miquelon, Seychelles, Singapore, Swaziland, Syrian Arab Republic, Tunisia, Yugoslavia.

(b) GDP per capita in 1977 \$500 or below: Antigua, Bangladesh, Benin, Cape Verde, Comoros, Congo, Democratic Yemen, Egypt, Gambia, Grenada, Guinea, Guinea-Bissau, Haiti, Jordan, Kiribati, Lao People's Democratic Republic, Lebanon, Lesotho, Maldives, Mauritania, Niger, St. Helena, Saint Vincent and the Grenadines, Senegal, Sierra Leone, Somalia, Sri Lanka, Tokelau, Tonga, Tuvalu, Upper Volta, Viet Nam, Wallis and Futuna, Western Sahara, Yemen, Zambia.

## Other countries

Developed low-cost agricultural exporters: Australia, Canada, New Zealand, South Africa, United States.

Other developed market-economy countries: Austria, Belgium, Denmark, Faeroe Islands, Finland, France, Federal Republic of Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Liechtenstein, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Socialist countries of Eastern Europe: Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania, USSR.

Socialist countries of Asia: China, Democratic People's Republic of Korea, Mongolia.

## World output<sup>a</sup> summary, by main regions (In percentages)

		Period		Forecast		
Region	1975- 1980	1979	1980 •	1981	1982	
World	4.0	3.8	2.1	2.2	3.0	
Developed market-						
economy countries	3.5	3.6	1.2	1.5	2.2	
North America	3.4	3.2	-0.2	2.5	1.5	
Canada	2.9	2.7	0.1	2.0	2.0	
United States	3.4	3.2	-0.2	2.5	1.5	
Western Europe	3.0	3.3	1.5	-0.4	2.0	
of which:						
France	3.2	3.2	1.3	-0.5	1.8	
Germany,						
Fed. Rep. of	3.6	4.5	1.8	-1.2	2.0	
Italy	3.9	5.0	4.0	-0.6	1.9	
United Kingdom	1.6	1.3	-1.8	-1.5	0.5	
Japan	5.6	5.9	4.3	3.5	4.4	
Others :	2.1	4.0	2.2	5.1	4.0	
Developing countries	5.0	4.8	3.8	3.2	5.5	
By analytical groups:	••••					
Major oil-exporting						
countries	3.7	4.0	- 5.5	-2.0	6.0	
Oil sector	0.0	3.0	-12.7	-7.0	3.5	
Non-oil sector	8.1	5.0	8.0	12.0	12.0	
Net oil-importing coun-	0.1	3.0	0.0	12.0	12.0	
tries	5.0	4.7	3.6	4.5	4.8	
Exporters of manufac-	5.0	/	5.0	4.5		
	6.1	7.1	4.8	5.1	5.2	
tures	3.5	1.4	4.0 1.8	3.4	4.0	
	3.5	1.4	1.0	5.4	4.0	
Least developed coun-	20	25	2.7	20		
tries	3.8	2.5		2.9	3.6	
China	4.9	/.0	5.0	4.5	5.0	
	4.2	25	20			
Eastern Europe	4.3	2.5	2.9	3.2	3.5	
Memo item: unemployment						
rates in OECD countries <sup>b</sup>	••	5.1	5.8	6.4	6.9	
of which:						
Canada		7.5	7.5	7.3	7.5	
France		5.9	6.4	7.5	8.0	
Germany,						
Fed. Rep. of		3.8	3.8	5.0	5.5	
Italy		7.7	7.6	8.0	8.5	
Japan		2.1	2.0	2.1	2.0	
United Kingdom		5.7	7.4	10.5	11.5	
United States		5.8	7.1	7.6	7.6	
Ounce States	••	5.0	/.1	/.0	1.0	

Source: UNCTAD secretariat calculations, based on official national and interna tional sources.

<sup>a</sup> Gross domestic product.

b Total is weighted average of standardized unemployment rates in 15 QECD countries; individual countries are shown on a national basis.
 Estimate.

# World trade summary: annual rates of change in volumes and prices, 1970-1982

# A. Developed market-economy countries by main regions (In percentages)

		Period			Forecast		
Country, region or group	1970-1980	1975-1980	1979	1980 *	1981	1982	
World exports					-		
Volume	5.4 14.2	5.9 11.7	7.4 18.9	1.5 20.0	1.0 4.5	5.0 9.0	
Developed market-economy countries							
Export volume	6.4	6.5	6.5	4.6	1.8	5.1	
Terms of trade	-2.1	- 2.0	- 8.2	- 8.2	- 0.2	1.0	
Purchasing power of exports	4.2	4.4	- 3.3	- 4.0	1.6	6.1	
Import volume	4.9	2.8	8.1	-0.1	-0.8	4.4	
North America							
Export volume	6.3	6.7	6.6	7.0	1.9	2.2	
Terms of trade	-2.7	-3.2	1.1	- 10.2	0.9	3.0	
Purchasing power of exports	3.5	3.4	7.8	- 4.2	2.8	5.2	
Import volume	4.8	5.4	2.9	- 8.5	2.6	5.6	
Western Europe							
Export volume	5.8	6.0	8.9	0.0	0.7	6.0	
Terms of trade	-1.0	-1.0	- 1.0	- 5.0	-0.9	0.5	
Purchasing power of exports	4.8	5.0	7.0	- 5.0	-0.1	6.5	
Import volume	5.0	6.2	10.8	1.5	- 2.7	4.0	
Japan							
Export volume	9.5	9.0	- 3.0	18.5	8.3	5.5	
Terms of trade	-5.7	-5.2	-13.4	-20.6	0.0	0.0	
Purchasing power of exports	3.3	3.6	-16.8	-1.7	8.3	5.5	
Import volume	4.3	4.4	10.0	- 5.3	1.0	4.8	
Others							
Export volume	4.8	6.0	10.9	9.8	2.5	5.6	
Terms of trade	-2.1	-2.5	3.3	-6.4	-0.3	1.4	
Purchasing power of exports	2.6	3.4	14.6	3.2	2.2	7.1	
Import volume	2.0	2.7	6.7	2.7	9.5	4.4	

For sources and notes, see end of table \* Estimate

# ANNEX TABLE A.2 (continued)

# World trade summary: annual rates of change in volumes and prices, 1970-1982

# B. Developing countries and territories by main regions (In percentages)

		Period			Forecast	
Region	1970-1980	1975-1980	1979	1980 •	1981	1982
Developing countries and territories						
Export volume	3.1	5.1	5.9	-6.1	-0.2	6.9
Terms of trade	6.8	2.9	5.7	17.8	2.0	1.2
Purchasing power of exports	10.0	8.1	12.0	10.6	1.8	5.6
Import volume	7.3	5.2	-1.9	7.4	5.9	7.2
Western hemisphere						
Export volume	4.2	8.6	9.8	5.2	4.8	9.0
Terms of trade	- 0.3	-2.7	-4.9	1.7	-1.6	-1.6
Purchasing power of exports	3.9	5.7	4.5	7.1	3.2	7.3
Import volume	4.5	1.7	0.2	7.1	3.4	4.1
North Africa						
Export volume	-3.9	1.1	1.2	-13.1	-5.4	4.8
Terms of trade	13.2	7.5	17.3	34.7	8.6	-0.4
Purchasing power of exports	8.8	8.7	18.7	17.1	2.7	4.4
Import volume	8.8	-0.1	- 10.9	- 4.7	6.4	7.6
Other Africa						
Export volume	0.9	1.6	6.2	-0.5	-8.5	15.4
Terms of trade	5.0	5.5	11.1	13.6	3.1	-1.3
Purchasing power of exports	5.9	7.2	18.0	13.1	- 5.6	13.9
Import volume	4.7	2.6	- 19.7	7.7	6.4	8.8
West Asia						
Export volume	-0.3	-2.2	3.5	- 16.4	-6.1	4.4
Terms of trade	19.0	8.6	19.8	31.3	9.6	-0.6
Purchasing power of exports	18.7	6.2	24.0	9.7	2.9	3.8
Import volume	16.2	10.4	2.3	11.6	14.4	14.8
South Asia						}
Export volume	-0.2	1.0	1.2	-13.6	3.1	4.2
Terms of trade	-5.5	-7.0	- 16.4	-9.8	-1.4	0.6
Purchasing power of exports	-5.7	-6.0	-7.5	-22.1	1.7	4.9
	0.7	1.9	-6.7	3.9	-4.3	-0.4
•	0.7	1.5	= 0.7	5.5	4.5	0.4
East Asia	7.9	9,9	61	8.3	7.1	6.3
Export volume	1.2	-1.6	6.1 14.9	-3.6	-1.9	-0.5
Terms of trade	9.2	8.1	14.9	-3.6	5.1	5.8
Purchasing power of exports	6.3	5.1	0.7	4.4	6.5	6.6
Import volume	0.3	1 5.1	0.7	1 3./	0.0	1 0.0

For sources and notes, see end of table. • Estimate.

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# ANNEX TABLE A.2 (concluded)

# World trade summary: annual rates of change in volumes and prices, 1970-1982

## C. Developing countries and territories by major analytical groups (In percentages)

		Period			Forecast	
Group	Ì970-1980	1975-1980	1979	1980 •	1981	1982
Major oil exporters						
Export volume	-1.4	-0.7	4.0	-15.4	-6.6	6.6
Terms of trade	19.6	11.6	21.6	49.7	9.3	-0.8
Purchasing power of exports	17.9	10.8	26.5	26.6	2.1	5.8
Import volume	14.3	8.1	- 6.4	22.2	14.0	14.3
Net oil-importing countries						
Export volume	7.3	9.0	8.8	4.1	6.9	7.5
Terms of trade	-3.2	-3.7	-11.1	-6.1	-4.4	-1.0
Purchasing power of exports	3.8	5.1	- 2.2	- 2.2	2.2	6.4
Import volume	4.4	4.2	-	1.3	1.6	3.1
Exporters of manufactures						
Export volume	11.0	13.5	6.8	8.3	8.2	9.6
Terms of trade	-3.3	-3.4	-8.5	-6.4	-2.9	-1.2
Purchasing power of exports	7.3	9.6	-2.3	1.4	5.1	8.3
Import volume	7.0	7.2	5.3	3.0	4.1	4.3
MSA countries						
Export volume	0.5	1.8	7.8	-4.9	5.3	4.3
Terms of trade	-2.5	-2.0	-15.3	-6.2	4.1	-1.1
Purchasing power of exports	- 2.0	-0.2	- 8.8	- 10.7	1.1	3.2
Import volume	1.3	0.3	-11.1	-0.1	- 0.6	1.3
Least developed countries						,
Export volume	-0.4	3.6	14.6	3.3	5.1	4.3
Terms of trade	- 1.8	- 1.0	-9.0	- 5.2	-9.1	-2.5
Purchasing power of exports	-2.2	2.6	4.3	- 2.1	-4.5	1.6
Import volume	1.5	1.8	- 8.5	-10.2	2.2	3.8

Source: UNCTAD secretariat calculations, based on official national and international sources.

Note: For method of calculation, see Explanatory Notes to Annex A. • Estimate.

## World prices summary: annual rates of change

# A. Internationally traded goods, by major commodity groups (In percentages)

		1970-	1975-			Forecast	
Commodity group	SITC	1980	1973-	1979	1980 *	1981	1982
Food          Agricultural raw materials          Crude petroleum          Non-ferrous metals          Manufactures	0+1 2+4 331 68 5-8	12.3 12.4 34.7 7.8 11.5	9.7 10.8 24.2 13.2 9.9	12.4 20.5 45.3 32.5 14.4	16.9 5.0 73.5 11.4 10.5	- 10.2 - 7.5 13.4 - 11.8 2.2	3.4 6.6 11.5 8.7 9.5

# B. Consumer prices, by main regions and analytical groups (In percentages)

		1070			Forecast	
Region	1970- 1980	1975- 1980	1979	1980 *	1981	1982
Developed market-economy countries	9.6	10.6	9.8	13.1	11.0	9.5
North America	7.8	8.9	11.1	13.2	11.2	10.0
Western Europe	11.3	13.0	10.5	14.7	12.3	10.2
Japan	9.0	6.5	3.6	8.0	6.5	5.5
Others	10.7	11.2	9.7	11.1	10.9	12.2
Developing countries and territories .	19	24	33	32		l
Western hemisphere	21	36	48	56		
North Africa	3	8	10	14		l
Other Africa	5	13	17	16		
West Asia	3	· 11	5	12		l
South Asia	6	7	6	12		
East Asia	6	10	13	<u>`17</u>		
By analytical groups:						
Net oil-exporting countries	2	12	10	14		1
Net oil-importing countries	12	22	36	34		

Source: UNCTAD secretariat calculations, based on official international and national sources. \* Estimate.

## ANNEX TABLE A.4

Share of major economic groupings in total world trade

(Percentages)

			Exports					Imports		
Grouping	1950	1960	1970	1972	1980	1950	1960	1970	1972	1980
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Developed market-economy countries .	61.1	66.8	71.3	71.8	63.3	65.3	65.9	72.3	72.7	69.6
Developing countries	30.8	21.5	18.1	17.8	28.1	26.7	22.2	17.1	16.5	21.5
Major oil exporters	6.2	6.8	6.2	6.9	16.2	4.1	4.6	3.3	3.7	6.5
Other developing	24.6	14.9	11.7	, 10.9	11.9	22.6	17.6	13.8	12.9	15.0
of which:										
Fast-growing exporters of manufactures	7.8	3.9	3.4	3.6	4.9	7.3	4.9	4.3	4.5	5.8
Least developed	1.5	1.1	0.7	0.6	0.3	1.3	1.2	0.9	0.7	0.6
Socialist countries	8.1	11.7	10.6	10.4	8.6	7.9	11.9	10.5	10.1	9.0

Source: UNCTAD, Handbook of International Trade and Development Statistics: Supplement 1980.

# Commodity composition of exports and imports of developing countries (In percentages)

			Exp	orts			Imp	oorts	
Commodity group	SITC	1965	1970	1975	1979	1965	1970	1975	1979
TOTAL	0-9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Primary commodities,	0+1+2+4							1	
excluding fuels	+ 68	53.7	49.3	25.2	22.9	23.4	20.8	17.6	17.7
Food and beverages	0+1	28.2	24.3	14.1	12.4	15.6	12.6	11.8	10.9
Raw materials	2 + 4 + 68	25.5	25.0	11.1	10.5	7.8	8.2	5.8	6.8
Fuels	3	31.4	33.0	59.5	56.6	8.9	8.0	14.5	15.4
Manufactures	5–9 less 68	14.9	17.7	15.3	20.5	67.7	71.2	67.9	66.9
Machinery and transport equipment	7	1.1	2.6	3.4	5.2	30.8	33.4	35.2	32.8

Source: UNCTAD secretariat, based on data from, and the country classification used in, United Nations, Monthly Bulletin of Statistics, May 1981.

### ANNEX TABLE A.6

# Balance of payments summary of developing countries and territories (In billions of US dollars)

## A. By main regions

liem	Exports	Imports	Trade	Balance on non-factor services and private	Investment income	Current account	Total capital flows	Changes in reserves (minus equals
Region	(f.o.b.)	(f.o.b.)	balance	transfers	(net)	balance	(net) <sup>a</sup>	increase)
Total		}						
1979	414.6	338.6	75.9	- 39.8	-20.4	15.8	6.8	-22.6
1980	554.0	439.7	114.3	-52.1	-29.2	33.0	-12.9	-20.0
1981	585.1	482.9	102.2	-66.0	-31.3	4.9	-4.4	-0.5
1982	676.4	566.5	109.9	-78.1	-29.2	2.6	5.8	- 8.4
Western hemisphere								
1979	84.3	85.9	-1.6	- 4.7	- 14.4	-20.7	27.9	- 7.1
1980	108.5	110.6	-2.1	-6.3	- 19.9	-28.3	25.5	2.8
1981	115.8	118.3	-2.5	-6.6	-24.6	-33.8	32.5	1.3
1982	135.0	133.8	1.2	- 8.5	-26.1	-33.4	33.1	0.3
North Africa								
1979	31.4	25.8	5.5	- 0.9	-1.5	3.2	-0.1	-3.0
1980	44.1	29.5	14.6	-1.8	-2.0	10.8	-2.6	-8.2
1981	46.2	32.0	14.2	-2.1	-1.6	10.4	-10.5	0.1
1982	52.4	37.4	15.0	-2.9	-0.9	11.2	- 10.8	-0.3
Other Africa								
1979	37.7	32.7	5.0	-7.9	2.5	-5.4	9.4	-4.0
1980	51.3	42.4	8.9	-10.8	- 3.0	-5.0	9.5	-4.5
1981	49.8	46.4	3.4	-12.5	3.8	-12.8	11.7	1.1
1982	61.9	55.1	6.8	-15.1	- 5.0	-13.4	13.7	- 0.4
West Asia								
1979	142.4	64.8	77.6	-30.1	5.8	53.2	-48.3	- 5.0
1980	199.3	92.2	107.1	-38.0	7.7	76.7	-69.9	-6.8
1981	208.9	107.4	101.5	-48.7	13.7	66.5	-63.2	-3.3
1982	236.1	134.2	102.0	- 54.9	20.0	67.0	-63.4	- 3.7
South Asia								
1979	11.5	17.1	- 5.6	2.3	-0.6	- 3.9	5.1	-1.2
1980	11.1	22.0	-10.9	2.8	- 0.9	-9.0	8.5	0.6
1981	11.9	22.2	-10.3	2.3	-1.4	-9.5	9.7	-0.2
1982	13.6	24.1	-10.6	2.4	- 1.7	- 9.8	9.5	0.4
East Asia								
1979	100.1	98.7	1.4	- 1.8	-6.7	-7.1	10.4	-3.3
1980	129.6	126.9	2.7	- 1.7	- 10.3	-9.3	12.9	- 3.6
1981	141.3	140.3	1.0	-2.5	- 12.6	-14.1	13.8	0.3
1982	164.0	164.0	0.1	-3.8	14.2	- 18.1	22.7	4.7

For sources and notes, see end of table.

## ANNEX TABLE A.6 (continued) Balance of payments summary of developing countries and territories (In billions of US dollars)

Major oil exporters         220.7         106.8         113.9         -46.5         0.7         68.1         -53.6         -14.5           1980         312.7         146.0         166.7         -58.1         2.0         110.6         -89.2         -21.4           1981         327.2         170.6         156.6         -72.6         9.5         93.5         -88.0         -5.5           1982         377.4         212.7         164.6         -83.6         15.9         96.9         -92.9         -4.0           Net oil-importing countries         1979         161.4         196.4         -35.0         3.9         -14.4         -45.4         54.8         -9.5           1980         195.8         246.8         -51.0         4.0         -21.0         -68.0         78.4         -10.4           1981         208.4         261.2         -52.8         4.8         -29.6         -77.7         77.9         -0.2           1982         243.0         295.2         -52.2         4.6         -33.4         -80.9         85.2         -4.3           1981         124.8         145.3         -20.5         2.1         -19.5         -37.9         35.0         2.8	liem Region	Exports (f.o.b.)	Imports (f.o.b.)	Trade balance	Balance on non-factor services and private transfers	Investment income (net)	Current account balance	Total capital flows (net)ª	Changes in reserves (minus equals increase)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		+			+				
Net oil-importing countries161.4196.4 $-35.0$ $3.9$ $-14.4$ $-45.4$ $54.8$ $-9.5$ $1979 \dots 195.8$ $246.8$ $-51.0$ $4.0$ $-21.0$ $-68.0$ $78.4$ $-10.4$ $1981 \dots 208.4$ $261.2$ $-52.8$ $4.8$ $-29.6$ $-77.7$ $77.9$ $-0.2$ $1982 \dots 208.4$ $261.2$ $-52.8$ $4.8$ $-29.6$ $-77.7$ $77.9$ $-0.2$ $1982 \dots 243.0$ $295.2$ $-52.2$ $4.6$ $-33.4$ $-80.9$ $85.2$ $-4.3$ Exporters of manufactures114.0 $133.9$ $-19.9$ $1.7$ $-14.0$ $-32.3$ $28.2$ $4.0$ $1981 \dots 124.8$ $148.3$ $166.3$ $-18.0$ $2.4$ $-21.3$ $-36.9$ $41.8$ $-4.9$ $MSA$ countries $148.3$ $166.3$ $-18.0$ $2.4$ $-21.3$ $-36.9$ $41.8$ $-4.9$ $MSA$ countries $114.3$ $32.4$ $52.4$ $-20.0$ $1.4$ $-3.7$ $-22.2$ $21.2$ $1.0$ $1981 \dots 33.9$ $50.8$ $-20.0$ $1.4$ $-3.7$ $-22.2$ $21.2$ $1.0$ $1981 \dots 33.9$ $36.4$ $57.8$ $-21.3$ $0.7$ $-6.0$ $-26.6$ $26.5$ $0.1$ Least developed $6.7$ $11.0$ $-4.3$ $-0.0$ $-0.4$ $-4.6$ $5.0$ $-0.4$ $1980 \dots 6.6$ $11.6$ $-4.9$ $-0.1$ $-0.8$ $-5.8$ $5.4$ $0.5$									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1982	377.4	212.7	164.6	- 83.6	15.9	96.9	-92.9	-4.0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				`					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		161.4	196.4	-35.0	3.9	- 14.4	- 45.4	54.8	-9.5
$1982 \dots \dots$ $243.0$ $295.2$ $-52.2$ $4.6$ $-33.4$ $-80.9$ $85.2$ $-4.3$ Exporters of manufactures $90.2$ $104.3$ $-14.2$ $1.3$ $-9.1$ $-21.9$ $23.3$ $-1.4$ $1979 \dots \dots$ $114.0$ $133.9$ $-19.9$ $1.7$ $-14.0$ $-32.3$ $28.2$ $4.0$ $1981 \dots \dots$ $124.8$ $145.3$ $-20.5$ $2.1$ $-19.5$ $-37.9$ $35.0$ $2.8$ $1982 \dots \dots$ $124.8$ $145.3$ $-20.5$ $2.1$ $-19.5$ $-37.9$ $35.0$ $2.8$ $1982 \dots \dots$ $124.8$ $166.3$ $-13.4$ $2.2$ $-2.2$ $-13.4$ $14.6$ $-1.1$ $1980 \dots \dots$ $30.9$ $50.8$ $-20.0$ $1.4$ $-3.7$ $-22.2$ $21.2$ $1.0$ $1981 \dots \dots$ $32.4$ $52.4$ $-20.0$ $0.6$ $-5.2$ $-24.6$ $24.3$ $0.3$ $1982 \dots \dots$ $36.4$ $57.8$ $-21.3$ $0.7$ $-6.0$ $-26.6$ $26.5$ $0.1$ Least developed countries $5.7$ $10.2$ $-4.5$ $0.4$ $-0.4$ $-4.6$ $5.0$ $-0.4$ $1980 \dots \dots$ $6.6$ $11.6$ $-4.9$ $-0.1$ $-0.8$ $-5.8$ $5.4$ $0.5$	1980	195.8	246.8	-51.0	4.0	-21.0	-68.0	78.4	- 10.4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1981	208.4	261.2	- 52.8	4.8	-29.6	-77.7	77.9	-0.2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		243.0	295.2	- 52.2	4.6	- 33.4	- 80.9	85.2	-4.3
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	manufactures								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				+				++	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1982	148.3	166.3	- 18.0	2.4	-21.3	- 36.9	41.8	-4.9
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	MSA countries								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		28.6	42.0	-13.4	2.2	- 2.2	-13.4	14.6	-1.1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1980		50.8	-20.0	1.4	3.7	-22.2	21.2	1.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	I	32.4	52.4	-20.0	0.6	- 5.2	-24.6	24.3	0.3
countries5.710.2 $-4.5$ 0.4 $-0.4$ $-4.6$ 5.0 $-0.4$ 19806.711.0 $-4.3$ $-0.0$ $-0.5$ $-4.8$ 4.40.419816.611.6 $-4.9$ $-0.1$ $-0.8$ $-5.8$ 5.40.5	I	36.4	57.8	-21.3	0.7	-6.0	- 26.6	26.5	0.1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	<b>_</b>								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		57	10.2	-4.5	0.4	-0.4	-4.6	5.0	-0.4
1981 6.6   11.6   -4.9   -0.1   -0.8   -5.8   5.4   0.5		+							
	1982	7.3	13.1	- 5.8	-0.1	-1.1	-7.0	7.1	-0.2

## B. By analytical groups

Source: UNCTAD secretariat calculations based on official national and international sources. 1980 figures are preliminary; 1981-1982 figures are forecasts.

a Including short-term capital flows plus errors and omissions.

## ANNEX TABLE A.7

# Net long-term financial flows from DAC member countries to developing countries and multilateral agencies, 1961-1969<sup>a</sup>

(Millions of US dollars)

	1961	1962	1963	1964	1965	1966	1967	1968	1969
Total net flows	9205	8396	8521	9583	10289	10350	11356	13461	13680
Official development assistance	5150	5402	5728	5902	5873	5961	6511	6282	6550
Non-concessional flows									
Bilateral official export credits .	636	458	190	-123	198	259	392	646	502
Other	83	68	49	82	102	133	85	93	75
Bilateral private export credits .	573	572	660	859	751	1124	1007	1597	2047
Direct investment	1834	1495	1603	1572	2459	2174	2103	3146	2921
Portfolio investment	610	147	327	837	655	470	770	940	180
Via multilateral institutions	320	254	-36	454	252	228	487	757	404

Sources: UNCTAD secretariat, based on OECD, Development co-operation, 1975 Review (Paris, 1975); Flow of Resources to Developing Countries (Paris, 1973).

<sup>a</sup> Including flows to Southern European recipient countries and territories.

ltem	Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
TOTAL		17.60	18.95	20.95	26.54	31.46	50.63	50.01	54.94	67.74	70.49
Official Developme	nt						•				
Assistance		7.46	8.36	8.71	10.29	14.68	18.41	17.46	18.53	19.52	24.62
DAC bilateral		5.45	6.07	6.26	6.69	8.03	9.27	8.71	9.08	11.91	14.16
Socialist count			ļ								
Eastern Euro	pe	0.78	0.79	1.11	1.27	1.11	0.88	0.85	0.78	0.82	1.84
Multilateral ins	titutions .	0.88	1.03	0.89	1.18	2.04	2.79	2.63	2.75	3.00	3.45
OPEC bilateral		0.35	0.47	0.45	1.15	3.50	5.47	5.27	5.92	3.79	5.17
		10.14	10.59	11.84	16.25	16.78	32.22	32.55	36.41	48.22	45.87
DAC: Official	and										
private expos	rt credits .	2.21	2.79	1.80	1.89	2.62	4.52	5.94	8.52	10.82	8.95
Private direc	t invest-										
ment	`	3.50	2.98	3.77	4.25	1.01	9.44	7.04	7.91	10.30	12.12
Other bilater	al	0.80	0.90	0.80	0.18	0.18	0.54	0.62	0.85	1.13	3.45
Socialist countr	ries of										
Eastern Euro	ре	0.11	0.10	0.11	0.10	0.09	0.09	0.12	0.11	0.10	0.10
Multilateral ins	titutions .	0.48	0.67	0.57	0.56	- 0.01	1.20	1.43	2.19	2.67	2.87
OPEC bilateral		0.24	0.10	0.30	0.45	4.06	5.98	3.74	1.75	1.59	1.72
Bank lending		2.55	2.80	4.08	8.24	8.50	10.20	12.75	13.17	18.87	14.17
Bonds		0.25	0.25	0.41	0.58	0.33	0.25	0.91	1.91	2.74	2.49
Memo items:											
Interest payme	nts by										
developing c		2.5	2.9	3.6	4.7	6.6	8.6	10.8	13.1	18.2	25.7

Net long-term financial flows to developing countries<sup>a</sup> from all sources, 1970-1979 (Net disbursements, in billions.of US dollars)

Source: UNCTAD secretariat, based on data from OECD and multilateral institutions. See, in particular, OECD, Development Co-operation, 1980 Review (Paris, 1980).

<sup>a</sup> Developing countries in Africa, Asia and Latin America.
 <sup>b</sup> Estimates based on OECD and World Bank data.

			()	Aillions o	f US dol	lars)					
Country	Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
India		90	125	118	159	222	414	633	927	978 *	990*
Pakistan				129	147	177	275	434	885	1419	1556
Jordan		3	2.2	5.6	7.6	6.3	5.1	11.3	(3.8)	12.8	
Morocco		36	74	107	211	299	482	499	545	702	892
Democratic Yemer	n	52.1	43.8	27.1	32.9	42.9	58.8	119.3	187.3	254.8	311.5
Yemen			[	l		135.5	270.2	675.8	987.1	946.2	1025.6
Bangladesh					22.4	26.0	31.2	33.3	95.3	126.1	
Korea, Republic of	f	95	105	119	155	154	158	194	172	433	401
Philippines		29	34	80	94	123	165	148	146	193	229
Sri Lanka		(0.9)	(3.4)	(4.3)	0.2	(0.2)	2.7	6.7	10.4	22.0	48.2
Tunisia		23	44	53	91	106	131	128	152	204	271
Upper Volta		16	21.6	22.5	35.8	29.2	32.4	36.5	40.2	45.6	
Syrian Arab Reput		7	8	39	37	44	52	53	92	94	112
Algeria		195	225	225	336	320	356	384	278	297	305
Egypt		4	11	5	6	42	90	87	43	29	41
Ethiopia		(2.6)	(1.8)	2.8	11.3	18.2	14.4	21.7	14.1	19.7	20.7
Cyprus		14	16	16	12	17	14	13	15	22	25
Malta		22	21	17	20	20	20	30	39	29	34
Total		587	725	959	1418	1780	2571	3354	7624	5827	6262

# ANNEX TABLE A.9 Private unrequited transfers (net), accruing to selected developing countries a

Source: IMF, International Financial Statistics, Yearbook 1980, Washington, D.C., 1980. • UNCTAD estimates.

\* Consists mainly of migrants' transfers and workers' remittances.

Net oil-importing developing countries, sources of financing of current account deficits, 1970-1979 (Billions of US dollars)

Item	Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Current account of	leficit	- 8.3	-11.4	- 8.6	- 8.9	-24.2	- 28.0	- 18.7	- 16.3	- 26.7	-45.4
Changes in reserv of which:		-2.3	- 0.7	-4.6	-6.0	- 1.5	0.7	-11.0	-12.2	- 12.6	-9.5
IMF lending .		-0.4	0.0	0.3	0.0	1.3	1.5	1.1	-0.6	-0.6	0.5
Official bilateral f											
concessional te	rms: <sup>b</sup>	3.7	4.0	4.3	3.9	6.0	7.1	7.3	6.1	6.6	7.9
DAC		3.2	3.6	3.7	3.7	4.6	5.2	4.5	3.9	4.9	5.4
<b>OPEC</b>		0.5	0.4	0.6	0.2	1.4	1.9	2.8	2.2	1.7	2.5
Other bilateral of		0.6	0.5	0.7	1.5	1.4	1.3	1.9	1.0	1.3	1.7
DAC		0.5	0.4	0.6	1.4	1.0	0.9	1.0	0.7	0.9	1.0
<b>OPEC</b>		0.1	0.1	0.1	0.1	0.4	0.4	0.9	0.3	0.4	0.7
Multilateral loans		0.9	1.4	1.3	1.9	2.8	3.8	3.7	4.0	5.0	5.7
Private long-term	flows:	4.4	4.2	4.9	6.6	16.0	18.0	20.3	18.9	20.2	26.3
Direct investme		2.3	2.3	2.8	3.5	6.0	7.9	7.1	8.2	9.2	10.0
Exports credits		1.6	1.5	1.1	0.6	0.8	1.1	2.2	2.9	3.3	3.0
Bilateral portfo	lio invest-										
ment		0.5	0.4	1.0	1.9	2.5	2.6	3.9	3.9	3.7	4.0
Other internation											
lending					0.6	6.7	6.4	7.1	3.9	4.0	9.3
Socialist countries		0.5	0.6	0.8	0.9	0.7	0.6	0.6	0.6	0.6	0.6
Short-term capita											
omissions		0.5	1.4	1.2	0.1	- 1.2	- 3.5	- 4.1	- 2.1	5.6	12.7

Source: UNCTAD secretariat estimates.

a Negative sign indicates an increase of reserves.

<sup>b</sup> Excluding technical assistance.

## ANNEX TABLE A.11

# Structure of world cereals and food production, consumption and trade, averages 1961/1965 and 1976/1980 (Percentage distribution by country groupings)

			d market-	Socialist	countries			Developii	ng countries			
		economy	countries						Other de	eveloping		1
		Low-cost agricul- tural exporters	Other countries	Europe	Asıa	Oil exporters	Self- sufficient in cereals	Agricul- tural surplus	\$500 per capita and above	Below \$500 per capita	All devel- oping countries	World
CEREALS												
Production	1961/65	18.2	11.4	15.1	20.2	4.4	18.9	3.8	3.0	5.0	35.1	100.0
	1976/80	19.2	9.9	16.0	20.6	4.9	18.3	4.2	2.7	4.1	34.2	100.0
Consumption	1961/65	12.9	14.3	15.6	20.6	4.8	18.1	4.5	3.5	5.6	36.6	100.0
	1976/80	12.0	12.2	17.8	20.9	6.3	17.0	5.1	3.7	5.0	37.0	100.0
Imports	1961/65	1.7	41.5	12.9	6.0	5.3	9.0	8.6	7.4	7.4	37.8	100.0
	1976/80	1.0	36.7	18.6	4.4	11.9	2.4	8.1	9.2	7.7	39.3	100.0
Exports	1961/65	58.4	10.2	7.7	2.2	1.0	17.0	0.8	1.7	1.1	21.6	100.0
	1976/80	61.9	16.7	3.9	2.0	0.1	13.7	0.8	0.7	0.2	15.5	100.0
TOTAL FOOD	ļ											
Production	1961/65	17.7	18.2	17.7	14.7	4.8	13.7	7.4	2.8	3.1	31.7	100.0
	1976/80	17.2	16.7	17.7	15.6	4.9	13.8	8.2	3.1	2.8	32.8	100.0
Consumption	1961/65	16.2	21.1	17.9	14.8	4.6	13.0	6.3	2.9	3.2	30.0	100.0
	1976/80	14.7	19.0	18.5	15.6	5.7	12.9	6.9	3.6	3.1	32.2	100.0
Imports	1961/65	14.7	49.7	9.8	2.2	4.2	4.4	5.1	5.8	3.9	23.5	100.0
	1976/80	11.0	48.3	11.3	1.9	9.1	2.7	4.9	6.7	4.1	27.5	100.0
Exports	1961/65	30.9	17.9	7.5	1.8	5.6	11.8	17.9	4.0	2.6	41.9	100.0
	1976/80	32.7	28.3	5.2	1.6	2.6	10.4	15.6	2.5	1.1	32.2	100.0

Source: UNCTAD secretariat calculations based on data supplied by the FAO Project, "Agriculture Towards 2000". For definitions, sources and country groupings see the explanatory note to Annex A.

# Food and cereals: per capita consumption, self sufficiency, terms of trade, and instability of production, by country groupings, 1961/1965 and 1976/1980

		Durd						Developu	ng countrie	25		
		Devel market-e coun	conom						Other de	eveloping		1
		Low-cost agricul- tural	Other coun-	count	Socialist countries	Oil	ficient in		\$500 per capita and	Below \$500 per	All devel- oping coun-	
		exporters	tries	Europe	Asıa	exporters	cereals	cereals surplus	above	capita	Ines	World
PER CAL CONSUM				τ	JS dolla	irs per c	apita, 1	1974-197	6 prices	5		
Cereals	1961/65	85 103	55 65	77 118	47 57	31 41	42 41	29 33	50 58	53 51	40 42	51 59
All food	1961/65 1976/80	373 414	280 330	305 401	118 141	104 120	104 103	142 148	145 185	103 106	113 119	176 193
SELF-SU	FFICIENCY	Production as per cent of consumption										
Cereals	1961/65 1976/80	142 161	80 81	97 90	98 99	92 78	104 108	84 83	83 75	90 82	96 93	100 100
All food	1961/65 1976/80	109 118	87 88	100 96	101 100	103 87	105 107	119 119	93 86	96 89	106 102	100 100
TERMS	OF TRADE				Index	1976/19	80 (196	il-1965 =	= 100)			
-	ral exports/cereal	102	106	114	117	129	113	134	119	98	122	1 111
INSTABILITY				Per ce	ent of av	erage c	ereal p	roductic	n 1966-	1980		
Coefficier	nt of variation	14.7	10.3	9.2	9.5	17.8	11.2	14.9	19.4	24.4	17.8	16.3

Source UNCTAD secretariat calculations, based on data supplied by the FAO Project, "Agriculture Towards 2000" Ibid

# ANNEX TABLE A.13

# Growth rates of food and cereals production by country groupings, 1961/1965-1966/1970, 1966/1970-1971/1975, 1971/1975-1976/1980 and 1961/1965-1976/1980

		d market-	1				Developing countries							
		countries	Soci	alıst count	ries				Other de	eloping				
	Low-cost agricul- tural exporters	Other countries	Europe	Of which USSR	Asia	Oıl e\por- iers	Self sufficient in cereals	Agricul- iural surplus	\$500 per capita and above	Below \$500 per capita	All devel- oping countries	World		
CEREALS														
1961/65-66/70	3.4	2.6	5.3	5.8	2.6	4.3	2.4	3.7	2.6	1.5	2.7	3.2		
1966/70-71/75.	3.0	2.1	2.4	1.6	3.2	3.1	2.7	3.4	2.0	1.5	2.6	2.7		
1971/75-76/80	3.3	1.1	2.2	2.5	3.3	3.3	2.9	3.8	1.9	1.2	2.8	2.7		
1961/65-76/80	3.2	1.9	3.3	3.3	3.0	3.6	2.7	3.6	2.2	1.7	2.7	2.9		
OTHER FOOD														
1961/65-66/70	2.0	2.3	3.5	3.9	2.3	1.5	2.2	2.7	3.8	2.5	2.4	2.5		
1966/70-71/75	1.6	1.8	2.0	2.1	3.0	2.9	1.9	3.4	3.1	1.5	2.6	2.2		
1971/75-76/80	2.1	1.8	1.2	0.9	3.2	2.7	3.3	3.2	4.3	2.8	3.2	2.4		
1961/65-76/80	1.9	1.9	2.2	2.3	2.8	2.4	2.5	3.1	3.7	2.3	2.7	2.4		
TOTAL FOOD														
1961/65-66/70	2.4	2.3	3.9	4.4	2.4	2.3	2.3	2.8	3.4	2.0	2.5	2.7		
1966/70-71/75	2.0	1.8	2.1	1.9	3.0	3.0	2.2	3.4	2.8	1.3	2.6	2.3		
1971/75-76/80	2.5	1.6	1.5	1.4	3.2	2.8	3.1	3.3	3.6	2.3	3.1	2.5		
1961/65-76/80.	2.3	1.9	2.5	2.6	2.9	2.7	2.5	3.2	3.3	1.9	2.7	2.5		
1961/65-76/80	2.3	1.9	2.5	2.6	2.9	2.7	2.5	3.2	3.3	1.9	2.7	2.5		

Source UNCTAD secretariat calculations based on data supplied by the FAO Project, "Agriculture Towards 2000" Growth rates are computed on five-year averages of volumes expressed in 1974-1976 prices For definitions of country groupings see the explanatory note to Annex A

ANNEX TABLE A.14									
World production of crude steel, 1970 and 1973-1979									
(Million tons)									

Country, country group or subgroup	1970	1973	1974	1975	1976	1977	1978	1979
Developed market-economy countries	398.0	462.6	463.3	391.0	416.0	400.2	421.0	442.3
of which:	390.0	402.0	405.5	391.0	410.0	400.2	421.0	112.5
European Economic Community (EEC)	138.1	150.0	155.4	125.3	134.1	126.1	132.8	140.2
Other Europe	24.2	29.7	31.1	29.6	29.9	29.5	31.1	33.7
Canada and the United States	130.5	149.9	145.8	118.8	129.4	127.3	139.2	139.4
Japan	93.3	119.3	117.1	102.3	107.4	102.4	102.1	111.7
Australia and New Zealand	7.1	7.9	8.0	8.1	8.0	7.5	7.8	8.3
South Africa	4.7	5.7	5.8	6.8	7.1	7.3	7.9	8.9
Developing countries and territories of which:	22.5	28.5	31.1	33.1	37.6	42.2	47.2	54.7
Africa	0.3 d	1.0°	0.9	1.0	1.1	1.4	1.6	1.6
Asia <sup>a</sup>	9.1	10.7	12.4	13.5	17.1	18.8	21.3	25.7
of which:								
India	6.3	6.9	7.1	8.0	9.4	10.0	10.1	10.1
Iran		0.2	0.6	0.6	0.6	0.7	0.7	0.7
Republic of Korea	0.5	1.2	1.9	2.0	3.5	4.3	5.0	7.6
Latin America <sup>b</sup>	13.1	16.8	17.8	18.6	19.4	22.0	24.3	27.4
Argentina	1.8	2.2	2.4	2.2	2.4	2.7	2.8	3.2
Brazil	5.4	7.2	7.5	8.4	9.3	11.3	12.2	13.9
Chile	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.7
Colombia	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
Cuba		0.2	0.3	0.3	0.3	0.3	0.3	0.3
Mexico	3.9	4.7	5.1	5.3	5.3	5.6	6.7	7.0
Peru	0.2	0.4	0.5	0.4	0.3	0.4	0.4	0.4
Venezuela	0.9	1.1	1.1	1.1	0.9	0.9	0.9	1.5
Socialist countries <sup>c</sup>	175.3	206.2	214.3	221.5	222.7	231.9	248.0	249.5
USSR	115.9	131.5	136.2	141.3	144.8	146.7	151.4	149.1
China	18.0	25.0	26.0	26.0	21.0	23.7	31.8	34.4
World	595.8	697.0	709.0	645.4	676.4	675.4	717.0	747.4

Source United Nations Economic Commission for Europe, Structural changes in the iron and steel industry (ECE/Steel/20), (United Nations publication, Sales No E 79 II E 6), and The steel market, various issues, figures provided by the International Iron and Steel Institute in Agence International pour la Presse, Europe, 5 January 1981
4 Includes Middle East

<sup>b</sup> Total production of Latin America is the sum of countries shown

c Socialist countries of Eastern Europe, China and the Democratic People's Republic of Korea

<sup>d</sup> The figure for Africa may be underestimated since K Warren, World steel An economic Geographi (Newton Abbot David and Charles, N Y Crane Russak and Co., 1975), p 269, gives a figure of 357,000 metric tons for the total production of Algeria, Egypt and Tunisia in 1970 and one of 140,000 metric tons for the production of Central Africa in 1969

e Includes the production of 500,000 metric tons by Zimbabwe (formerly Southern Rhodesia)

World production of cars and commercial vehicles by major countries and economic areas, 1972-1979	
(Units = thousand vehicles)	

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		1972			1973 a			1974			1975	
Country, country group or subgroup	Cars	Commer- cial vehicles	Total	Cars	Commer- cial vehicles	Total	Cars	Commer- cial vehicles	Total	Cars	Commer- cial vehicles	Total
Developed market-economy countries of which: European Economic	26 842	6 633	33 476	28 816	7 772	36 588	24 007	7 417	31 424	23 301	6 6 1 1	29 912
Community (EEC) Other Europe Canada and United States .	11 199 1 014 9 975	1 234 149 2 789	12 433 1 162 12 764	11 607 1 200 10 886	1 331 210 3 390	12 938 1 410 14 256	9 806 1 123 8 466	1 302 198 3 082	11 108 1 322 11 548	9 272 1 074 7 794	1 179 201 2 639	10 451 1 276 10 433
Japan	4 022 450 183	2 272 80 109	6 294 530 202	4 462 448 229	2 621 102 113	7 083 550 342	3 932 452 227	2 620 100 115	6 552 552 342	4 568 363 229	2 373 83 135	6 942 446 364
Developing countries and territories	1 085	318	1 404	ь 1 275	ь 674	с 1 953	1 454	483	1 937	1 484	506	1 990
Argentina Brazil Chile	201 521 23	68 101 3	269 622 26	234 459 14	78 270 3	312 729 17	212 754 12	74 151 2	286 905 14	185 779 6	55 151 2	240 930 8
Colombia	 39 46	21 17	60 63	20 39 50 40	6 58 9 7	26 97 59 47	36 72	52 29	88 101	23 111	51 39	74 150
Mexico	163 16 12	67 8 10	230 24 22	200 20 17	86 11 15	286 31 32	249 19 22	102 11 22	351 30 44	239 21 27	122 13 24	361 34 51
Republic of Korea Venezuela			 89	11 66	6 31	17 97 d	 79	 39	118			143
of Eastern Europe	979	749	1 728	1 514	1 017	2 531	1 490	903	2 393	1 598	952	2 550

Sources Automobile International, The World Automotive Market, (NY Johnston International Publishing Corporation) K Bhaskar, The future of the world motor industri, (London Kogan Page, NY Nichols Publishing Company, 1980) G Bloomfield, The world automotive industri (Newton Abbot David and Charles, 1978) It should be noted that the country coverage of the figures varies This applies to the three major groups, (developed market economy countries, developing countries and socialist countries) and to the subgroups, European Economic Community and Other Europe. It should also be noted that the totals in the sources cited are in some cases based on figures for the number of cars assembled from materials brought in from outside or for retail sales

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For source and notes, see end of table

USSR . . . . . . . . . . . . . . .

of which;

	1976			1977				1978			1979	
Country, country group or subgroup	Cars	Commer- cial vehicles	Total	Cars	Commer- cial vehicles	Total	Cars	Commer- cial vehicles	Total	Cars	Commer- cial vehicles	Total
Developed market-economy countries	27 032	8 054	35 086	28 673	8 869	37 542	29 176	9 218	38 393	28 699	8 832	37 53
European Economic Community (EEC) Other Europe	10 373	1 331 258	11 704	10 695 1 642	1 349 254	12 044 1 896	10 789 1 656	1 263 228	12 051 1 885	10 740 1 696		12 057
Canada and United States . Japan	9 681 5 028	3 448 2 814	13 129 7 841	10 423 5 431	4 005 3 083	14 428 8 514	10 284 5 748	4 351 3 186	14 636 8 935	9 363 6 176	3 631	12 994
Australia and New Zealand South Africa	365 185	89 115	454 300	314 167	88 90	403 257	493 205	132 57	625 262	511 213	123 60	634 274
Developing countries and territories	1 598	550	2 147	1 570	561	2 131	1 669	568	2 237	1 811	651	2 462
Argentina	142 822	51 163	193 985	168 774	67 146	235 920	133 925	46 139	179 1064	192 967	61 161	253
Chile	 26	 9	35	11 28	2 9	13 37	18	2	20	18	2	20
India	32 125	54 45	85 170	38 100	51 60	89 160	34	64	98 	29 	72	101
Malaysia	43 213	10 112	· 53 325	52 188	10 93	63 281	60 243	11 142	71 384	61 280	14 164	75 444
Peru	22	12 22	34 53	18 32	8 28	25 59	7 35	4 . 33	11 68	6 35	5 33	11 68
Republic of Korea	27 115	22 48	49 163	44 117	41 46	85 163	87 126	71 56	158 183	114 110	91 48	204 158
Socialist countries of Eastern Europe	1 956	1 004	2 960	2 051	1 024	3 075	2 212	1 065	3 267			
ÚSSR	1 239	786	2 025	1 280	808	2 088	1 312	839	2 1 5 1	1 314	859	2 17

## ANNEX TABLE A.15 (continued)

World production of cars and commercial vehicles by major countries and economic areas, 1972-1979 (Units = thousand vehicles)

• The 1973 figures are more comprehensive than those for other years, since they cover a larger number of countries and more categories of commercial vehicles. • The figures for cars and commercial vehicles exclude production in Costa Rica, Trinidad and Tobago, and Viet Nam.

<sup>c</sup> The figure includes estimates of total production in Costa Rica and Trinidad and Tobago but excludes that in Viet Nam.
<sup>d</sup> The figures include production in China.

### Socialist countries of Eastern Europe: selected economic indicators

(In percentages)

	1	Average an	nnual rate			Cha	ige over precedii	ig vear	
	1971-1975	1976-1	980	1981-1985			19	80	1981
	Actual	Planned	Actual	Planned	1978	1979	Planned	Actual	Plann
Growth of national income a		•							
Albania	6.6	6.6-7.0					12.7		
Bulgaria	7.8	7.7	5.4	4.6-5.4	5.6	6.5	5.71	5.7	5.1
Czechoslovakia	5.7	4.9-5.2	3.7	3.0-3.2	4.1	3.1	3.7	3.0	2.8
German Democratic Republic	5.4	5.0	4.2	5.1-5.4	3.8	4.0	4.8	4.2	5.0
Hungary	6.2	5.4-5.7	3.2	2.5-3.2	4.2	1.8	3.0-3.5	-0.8	2.0-2
Poland	9.8	7.0-7.3	1.6		3.0	- 2.3	1.4-1.8	-4.0	- 3.7
Romania	11.3	11.0	7.2	6.7-7.4	7.6	6.2	8.8	2.5	7.0
USSR	5.7	4.7	4.4	3.4-3.7	5.1	2.5	4.0	3.8	3.4
Total <sup>b</sup>	6.3	5.3-5.4	4.3		5.0	2.5	4.1	2.9	3.2
Growth of industrial output									
Albania	8.7	7.1-7.6			6.0	8.0	10.2		
Bulgaria	9.0	9.2	6.1	5.4-6.2	6.9	5.8	6.3	4.1	5.6
Czechoslovakia	6.7	5.7-6.0	4.6	4.0	5.0	3.7	4.0	3.2	2.6
German Democratic Republic	6.5	6.0	5.0	5.1-5.4	4.7	4.8	4.7	4.7	5.0
Hungary	6.4	5.9-6.2	3.4	3.5-4.1	4.9	3.0	3.5-4.0	- 2.0	3.0-3
Poland	10.4	8.2-8.5 <sup>d</sup>	4.4		4.9	2.7	3.0-4.2	-1.3	0.0
Romania	12.9	11.5	9.5	8.0-9.0	9.0	8.0	11.4	6.5	7.0
USSR	7.4	6.3	4.5	4.7-5.1	4.8	3.4	4.5	3.6	4.1
Total <sup>b</sup>	7.8	6.6-6.8	4.7		5.1	3.7	4.8	3.3	3.9
Growth of gross agricultural output									
Albania	5.9	6.6-7.1		1			17.8		
Bulgaria	2.2	3.7	2.1	3.7-4.1	5.0	7.0	3.7	-4.9	4.7
Czechoslovakia	2.9	2.6-2.8	1.7	2.0	1.5	-3.0	7.2	6.0	2.6
German Democratic Republic	2.1	3.0	1.2		1.4	-2.0		2.51	0.8
Hungary	3.5	3.2-3.4	2.3	2.3-2.8	2.0	0.0	5.0-5.5	3.4	3.0
Poland	3.2	3.0-3.5°	0.7		4.4	-1.4	5.8	-9.6	9.0
Romania	4.7	6.9-9.0	4.7	4.5-4.0	2.4	5.0	4.7-6.0	- 5.0	9.0
USSR	2.5	3.0	1.4	2.3-2.7	4.0	-4.0	8.8	-2.0	3.0
Total <sup>b</sup>	2.7	3.1-3.3	1.6		3.7	-2.3	7.7	-2.2	4.0

Source: UNCTAD secretariat and the Department of International Economic and Social Affairs of the United Nations, based on national statistical publications, plans and plan fulfilment reports.

<sup>a</sup> Net material product (NMP produced), or net value added of the material sectors of production, unless otherwise noted. The totals for planned and 1979 actual growth rates for Eastern Europe and the USSR have been computed employing, in the case of the USSR, the growth rate for NMP utilized (the sum of domestic final uses). Figures without decimals indicate rounded numbers as given in national sources.

<sup>b</sup> Excluding Albania.

Gross value of output at constant prices, except in the case of the German Democratic Republic, where the data refer to the value of commodity production (i.e., gross output less work in progress).
 <sup>d</sup> Value of output sold.

Change in the five-year average output from the average of the preceding five years, expressed in annual compound rates.

f Estimated.

# Socialist countries of Eastern Europe, growth rates of exports and imports by major area of destination.<sup>a</sup> Annual rates of change in trade values (in US dollars) (Increase in per cent over preceding year)

	Ex	ports	Im	ports
Country	1979	1980	1979	1980
Bulgaria				
World	11.5	16.3	4.7	11.7
Developed market-economy countries	71.2	23.8	7.0	23.9
Developing countries and territories	3.4	41.5	12.3	15.2
Socialist countries <sup>b</sup>	4.8	10.0	3.7	9.0
Czechoslovakia	1	I		
World	23.9	19.5	24.9	7.6
Developed market-economy countries	35.8	33.5	30.3	9.4
Developing countries and territories	22.6	51.8	28.0	21.4
Socialist countries <sup>a</sup>	20.9	9.8	22.8	5.4
German Democratic Republic				
World	13.5	14.9	11.3	17.7
Developed market-economy countries	19.9		34.4	
Developing countries and territories	9.7	43.0	-3.0	31.1
Socialist countries <sup>a</sup>	12.3	4.8	4.0	10.3
Hungary				
World	25.1	9.3	9.8	6.5
Developed market-economy countries	37.0	15.3	9.2	11.7
Developing countries and territories	17.5	10.9	10.9	18.1
Socialist countries <sup>b</sup>	20.5	5.2	9.9	0.0
Poland		[		
World	15.1	3.4	9.3	7.3
Developed market-economy countries	14.8	12.9	1.4	-0.1
Developing countries and territories	15.6	23.8	53.0	20.5
Socialist countries <sup>b</sup>	15.2	-5.2	9.0	10.6
Romania				
World	20.4	25.8	22.5	20.9
Developed market-economy countries	35.9	22.2	35.0	-11.6
Developing countries and territories <sup>b</sup>	19.5	42.0	61.5	110.6
Socialist countries <sup>b</sup>	9.6	21.6	11.7	13.7
USSR				10.5
World	23.5	18.4	13.8	18.8
Developed market-economy countries	51.1	28.3	25.4	20.0
Developing countries and territories	14.9	14.8	8.3	40.0
Socialist countries <sup>b</sup>	14.2	13.8	8.4	10.5
Socialist countries of Eastern Europe				
World	20.4	15.0	13.8	13.0
Developed market-economy countries <sup>c</sup>	39.2	17.7	21.4	11.5
Developing countries and territories <sup>c</sup>	14.9	29.7	13.8	39.1
Socialist countries <sup>b</sup>	14.0	9.0	9.4	7.6

Source: Department of International Economic and Social Affairs of the United Nations Secretariat. Calculations are based on the national and international statistics of the socialist countries of Eastern Europe.

<sup>a</sup> After conversion to US dollars. <sup>b</sup> Socialist countries of Eastern Europe and Asia.

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c Estimates based on incomplete data.

Unit	1949	1952	1957	1977	1978	1979	1980
bil. yuans	14.02	31.00	70.40	372.80	423.10	459.10	499.20
bil. KWH	4.31	7.20	19.34	223.40	256.55	281.95	300.60
mil. tons	32.43	66.50	130.00	550.00	618.00	635.00	620.00
mil. tons	0.12	0.40	1.46	93.64	104.05	106.15	105.95
mil. tons	0.158	1.40	5.35	16.33	22.08	34.48	27.10
mil. metres	1.890	4.200	5.050	10.151	11.029	12.150	13.470
1000 tons		194	803	7.238	8.693	10.654	12.32
bil. yuans	32.59	43.00	53.70	133.98	145.90	158.40	162.70
mil. tons	108.00	155.00	185.00	282.75	304.75	332.12	318.22
mil. tons	0.44	1.30	1.64	2.049	2.167	2.207	2.70
mil. tons		1.00		4.015	5.218	6.435	7.6
mil. heads	57.75	90.00	145.90	291.78	301.29	319.71	305.4
	bil. yuans bil. KWH mil. tons mil. tons mil. tons mil. metres 1000 tons bil. yuans mil. tons mil. tons mil. tons mil. tons	bil. yuans         14.02           bil. KWH         4.31           mil. tons         0.12           mil. tons         0.158           mil. tons         0.158           mil. metres         1.890           1000 tons            bil. yuans         32.59           mil. tons         0.44           mil. tons	bil. yuans         14.02         31.00           bil. KWH         4.31         7.20           mil. tons         32.43         66.50           mil. tons         0.12         0.40           mil. tons         0.158         1.40           mil. tons         0.158         1.40           mil. tons         0.158         1.40           mil. tons         1.890         4.200           1000 tons          194           bil. yuans         32.59         43.00           mil. tons         108.00         155.00           mil. tons         0.44         1.30           mil. tons          1.00	bil. yuans         14.02         31.00         70.40           bil. KWH         4.31         7.20         19.34           mil. tons         32.43         66.50         130.00           mil. tons         0.12         0.40         1.46           mil. tons         0.12         0.40         1.46           mil. tons         0.158         1.40         5.35           mil. metres         1.890         4.200         5.050           1000 tons          194         803           bil. yuans         32.59         43.00         53.70           mil. tons         108.00         155.00         185.00           mil. tons         0.44         1.30         1.64           mil. tons          1.00	bil. yuans         14.02         31.00         70.40         372.80           bil. KWH         4.31         7.20         19.34         223.40           mil. tons         32.43         66.50         130.00         550.00           mil. tons         0.12         0.40         1.46         93.64           mil. tons         0.12         0.40         1.46         93.64           mil. tons         0.158         1.40         5.35         16.33           mil. metres         1.890         4.200         5.050         10.151           1000 tons          194         803         7.238           bil. yuans         32.59         43.00         53.70         133.98           mil. tons         108.00         155.00         185.00         282.75           mil. tons         0.44         1.30         1.64         2.049           mil. tons          1.00          4.015	bil. yuans         14.02         31.00         70.40         372.80         423.10           bil. KWH         4.31         7.20         19.34         223.40         256.55           mil. tons         32.43         66.50         130.00         550.00         618.00           mil. tons         0.12         0.40         1.46         93.64         104.05           mil. tons         0.158         1.40         5.35         16.33         22.08           mil. metres         1.890         4.200         5.050         10.151         11.029           1000 tons          194         803         7.238         8.693           bil. yuans         32.59         43.00         53.70         133.98         145.90           mil. tons         108.00         155.00         185.00         282.75         304.75           mil. tons         0.44         1.30         1.64         2.049         2.167           mil. tons          1.00          4.015         5.218	bil. yuans         14.02         31.00         70.40         372.80         423.10         459.10           bil. KWH         4.31         7.20         19.34         223.40         256.55         281.95           mil. tons         32.43         66.50         130.00         550.00         618.00         635.00           mil. tons         0.12         0.40         1.46         93.64         104.05         106.15           mil. tons         0.158         1.40         5.35         16.33         22.08         34.48           mil. metres         1.890         4.200         5.050         10.151         11.029         12.150           1000 tons          194         803         7.238         8.693         10.654           bil. yuans         32.59         43.00         53.70         133.98         145.90         158.40           mil. tons         108.00         155.00         185.00         282.75         304.75         332.12           mil. tons         0.44         1.30         1.64         2.049         2.167         2.207           mil. tons          1.00          4.015         5.218         6.435

Source Based on official statistics See also Wu Chengming, "China's Economic Development in the past 80 years", Economic Reporter, September 1980 a In 1952 prices

### ANNEX TABLE A.19

China: foreign trade, 1950-1980 (Millions of US dollars)

Year	Exports	Imports	Balance
1950	620	590	+ 30
1951	780	1 1 2 0	- 340
1952	875	1 015	- 140
1953	1 040	1 255	-215
1954	1 060	1 290	-230
1955	1 375	1 660	- 285
1956	1 635	1 485	+ 150
1957	1 615	1 440	+ 175
1958	1 940	1 825	+115
1959	2 230	2 060	+ 170
1960	1 960	2 030	-70
1961	1 525	1 490	+ 35
1962	1 525	1 1 50	+ 375
1963	2 570	1 200	+ 370
1964	2 7 5 0	1 470	+ 280
1965	2 035	1 845	+ 190
1966	2 210	2 035	+ 175
1967	1 945	1 950	-5
1968	1 945	1 820	+ 125
1969	2 030	1 830	+ 200
1970	2 050	2 240	- 190
1971	2 415	2 305	+110
1972	3 085	2 835	+ 250
1973	4 895	4 975	- 80
1974	6 515	7 490	-975
1975	7 180	7 395	-215
1976	7 250	6 005	+1245
1 <b>977</b> ª	8 050	7 627	+ 423
1978 <sup>a</sup>	9 745	11 399	-1654
1979ª	13 987	17 266	- 3 279
1980 <sup>a</sup>	17 900	20 968	- 3 068

ANNEX TABLE A.20

## Changes in the direction of China's foreign trade, 1957-1978 (In percentages)

Region or country	1957	1960	1968	1978
Exports to:				
Developing countries and terri-	21.9	22.2	43.2	51.8
tories	21.9	22.2	43.2	51.8
of which:	10.0	10.5	1	
Hong Kong	10.3	10.5	17.4	21.6
Developed countries	13.4	14.5	31.7	36.2
Japan	-			20.2
United States	_	—		3.5
Germany, Fed. Rep. of				3.7
Socialist countries of Eastern				
Europe	64.6	63.3	24.9	12.0
Imports from:				
Developing countries and terri-				
tories	14.5	12.0	17.4	8.0
of which:				
Hong Kong	1.6	1.1	0.5	0.9
Developed countries	21.8	22.3	60.7	79.6
Japan		_		41.6
United States		_	1	11.2
Germany, Fed. Rep. of		_		13.6
Socialist countries of Eastern				1.5.0
_	63.7	65.7	21.8	12.4
Ешторе	03.1	0.5.7	21.0	14.4
				1

Source UNCTAD secretariat estimates based on data of China's trading partners <sup>a</sup> Excluding trade with USSR and socialist countries of Eastern Europe

Source UNCTAD secretariat estimates based on trade data of China's trading partners and United Nations, Monthly Bulletin of Statistics, July 1981

# Annex **B**

# SIMULATION OF THE EFFECTS OF ACCELERATED GROWTH IN DEVELOPING COUNTRIES

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### EXPLANATORY NOTES

### I. Methodology used in the projections

The projections discussed in this report were carried out with the aid of a global econometric model which is being developed by the UNCTAD secretariat. At present the model consists of a system of 15 single-sector regional growth models linked together via a five-sector trade model, an exchange rate model and a model explaining world spot prices for four sectors of tradeable goods. The system of models is solved via a two-stage iterative process whereby each model is solved in turn and the new solution values for any variables used in other parts of the system of models are entered as exogenous variables. The models are solved in sequence, with the system passing from model to model until the system as a whole has reached a mathematically convergent solution. The entire process is repeated for each year of the simulation period.

Each regional model contains as behavioural equations a consumption function, an investment demand function, price function, one for aggregate demand and one for the export sector, import demand functions for the four sectors of tradeable goods, export price function for those sectors and functions dividing up GDP into four components: agriculture, mining, manufacturing and other activities. Additionally, there is a control parameter which allows the model to be switched from a mode in which growth is endogenous to one where growth is exogenous and hence external capital requirements are derived from the model.

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There is a separate bilateral trade share model for each of the four sectors of tradeable goods, namely, food, raw materials, energy and manufactures. Each bilateral trade share is explained in terms of the exporting region's importance in global production and in terms of their relative competitiveness. Export volumes and import prices for each region are then determined by passing the import volume and export price sectors, respectively, through the trade share matrix. Export and imports of nonfactor services are linked via historical shares to exports and imports of goods. Global balance is achieved by scaling imports of non-factor services to equal exports at the global level.

Exchange rates are normally determined as functions of trade-weighted inflation differentials and cumulative trade deficits. Since the bilateral exchange rates are over-determined by a system of regional equations explaining trade-weighted exchange rates, the deviation of nominal exchange rates from desired rates is minimized through an ordinary least squares technique. Alternatively, full adjustment can be assumed.

A model is included which explains world spot prices of the four tradeable goods sectors in terms of world activity levels, the trade-weighted dollar exchange rate and rates of world inflation. These spot prices in turn are fed into the regional models, where, together with the rate of inflation in the export sector and the exchange rate, they determine the regional export price structures.

## II. Sources

A wide variety of sources for the data fed into the models have been used, essentially those published or specially provided by the United Nations system.

## **III. Regional classification**

The countries and territories included in each region and sub-region are as follows:

North America: Canada; Puerto Rico; United States.

Western Europe, North: Austria; Belgium; Denmark; Finland; France; Germany, Federal Republic of; Greenland; Iceland; Ireland; Luxembourg; Netherlands; Norway; Sweden; Switzerland; United Kingdom.

Western Europe, South: Cyprus; Gibraltar; Greece; Israel; Italy; Malta; Portugal; Spain; Turkey; Yugoslavia.

Socialist countries of Eastern Europe: Albania; Bulgaria; Czechoslovakia; German Democratic Republic; Hungary; Poland; Romania; USSR.

Japan: Japan.

Other developed: Australia; New Zealand; South Africa.

Western Hemisphere: Argentina; Barbados; Bolivia; Brazil; Chile; Colombia; Costa Rica; Cuba; Dominican Republic; Ecuador; El Salvador; Guatemala; Guyana; Haiti; Honduras; Jamaica; Mexico; Nicaragua; Panama; Paraguay; Peru; Suriname; Trinidad and Tobago; Uruguay; Venezuela.

North Africa: Algeria; Egypt; Libyan Arab Jamahiriya; Morocco; Tunisia.

Arid Africa: Chad; Comoros; Ethiopia; Mali; Mauritania; Niger; Somalia; Sudan; Upper Volta.

Other Africa: Angola; Benin; Botswana; Burundi; Cape Verde; Central African Republic; Congo; Equatorial Guinea; Gabon; Gambia; Ghana; Guinea; Guinea-Bissau; Ivory Coast; Kenya; Lesotho; Liberia; Madagascar; Malawi; Mauritius; Mozambique; Namibia; Nigeria; Reunion; Rwanda; Senegal; Sierra Leone; Swaziland; Togo; Uganda; United Republic of Cameroon; United Republic of Tanzania; Zaire; Zambia; Zimbabwe.

Middle East: Iran; Iraq; Jordan; Kuwait; Saudi Arabia; Syrian Arab Republic.

Indian subcontinent: Afghanistan; Bangladesh; Burma; India; Nepal; Pakistan; Sri Lanka.

Asian exporters of manufactures: Hong Kong; Republic of Korea; Singapore.

Other Asia: Fiji; Indonesia; Malaysia; Papua New Guinea; Philippines; Thailand.

Socialist countries of Asia: China; Democratic Kampuchea; Democratic People's Republic of Korea; Lao People's Democratic Republic; Mongolia, Viet Nam.

## IV. Tradable commodities by SITC group

Food, commodities (SITC 0+1)	
00-03, 05, 06, 09 (excl. 099)	Food, excluding cereals
04	Cereals
1, 07, 099	Spices, beverages and tobacco.
Other raw materials (SITC 2 + 4)	
2 (excl. 251, 266, 27, 28), 4, 08	Agricultural non-food
27, 28 (excl. 286)	Crude materials (non-agricultural)
Energy commodities (SITC 3)	
3, 286, 515, 688	Energy
Manufactures (SITC 5-9)	
5 (excl. 515)	Chemicals
61-66, 251, 266	Processed materials and simple manufactures
67, 68 (excl. 688), 69	Processed metals and simple manufactures
7 (excl. 73) 861	Machinery
73	Transportation equipment
8 (excl. 861)	Miscellaneous manufactures
9	Not elsewhere classified

## ANNEX TABLE B.1 World gross domestic product by region: actual and projected rates of growth, 1960-2000 (Percentage changes)

Region	1960- 1965	1965- 1970	1970- 1975	1975- 1980	1980- 1985	1985- 1990	1990- 1995	` 1995- 2000
Developed market-economy countries								
North America	4.70	3.12	2.62	3.36	1.96	2.20	2.20	2.20
Western Europe	Į I							
North	4.75	4.39	2.70	2.84	1.80	2.00	2.00	2.00
South	6.16	5.99	4.29	3.04	2.80	3.00	3.02	3.00
Japan	9.74	11.76	4.96	5.37	3.89	4.00	4.00	4.00
Other	5.09	5.69	3.86	2.37	2.79	3.02	2.95	3.00
Developing countries and territories								
Western Hemisphere	5.59	6.01	6.15	5.04	6.20	7.00	7.01	7.00
North Africa	10.54	8.23	1.58	7.48	6.88	7.05	7.00	7.00
Arid Africa	2.38	2.13	1.92	1.76	3.13	5.15	5.92	6.50
Other Africa	4.67	5.15	3.82	4.34	4.65	5.61	6.86	7.00
Middle East	8.45	8.45	8.54	5.44	4.80	6.00	6.98	7.00
Indian subcontinent	3.42	4.16	2.93	5.29	6.30	6.84	6.99	7.00
Asian exporters of manufactures	8.45	9.46	7.78	10.20	8.45	7.25	7.02	7.00
Other Asia	4.84	6.06	7.14	7.21	6.99	7.05	7.01	7.00
Socialist countries								
Eastern Europe	5.95	7.23	6.18	4.45	3.50	3.49	3.50	3.50
Asia	7.90	5.74	6.13	4.89	5.51	6.51	7.01	7.00

Note: For sources, definition of regions and methodology, see explanatory notes to annex B.

# ANNEX TABLE B.2

# Agriculture: actual and projected shares in GDP by region, 1960-2000

(In percentages)

4.88	4.04							
4.88	4.04							
I		3.60	3.44	2.89	2.60	2.33	2.09	1.86
6.30	5.21	4.63	4.21	3.54	3.20	2.87	2.58	2.31
7.34	14.74	12.44	11.60	10.38	9.24	8.17	7.21	6.37
2.23	9.03	5.91	5.31	4.26	3.66	3.13	2.68	2.28
9.01	7.70	7.05	6.78	6.38	5.64	4.96	4.34	3.81
6.94	16.12	13.62	11.98	10.24	8.40	6.75	5.39	4.31
7.09	20.40	13.83	15.59	12.62	10.27			5.33
0.41	53.55	47.57	41.63	40.06	36.93			24.75
9.79	43.92	37.71	32.43	27.93	23.96	20.02		13.22
1.99	9.86	7.48	6.14					1.60
1.62	44.19	45.00	42.38					16.09
8.53	25.09	18.88	14.45					4.29
1.61	38.54	34.82	30.49	26.23	21.99	18.25	15.01	12.28
[								
5.00	25.00	17.70	16 30	14 48	12.66	11.05	9.62	8.35
6.43	36.33	32.67	26.67	22.67	18.52			7.72
	7.34 2.23 9.01 6.94 7.09 0.41 9.79 1.62 8.53 1.61 5.00	7.34       14.74         2.23       9.03         9.01       7.70         6.94       16.12         7.09       20.40         0.41       53.55         9.79       43.92         1.99       9.86         1.62       44.19         8.53       25.09         1.61       38.54         5.00       25.00	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				

ANNEX TABLE B.3
Mining: actual and projected shares in GDP by region, 1960-2000
(In percentages)

Region	1960	1965	1970	1975	1980	1985	1990	1995	2000
Developed market-economy countries									
North America	3.13	2.90	2.94	2.66	2.38	2.26	2.13	2.00	1.87
Western Europe									
North	2.50	1.98	1.53	1.26	1.13	0.99	0.86	0.74	0.64
South	1.16	1.02	0.87	0.82	0.81	0.80	0.78	0.76	0.75
Japan	1.62	1.07	0.70	0.55	0.46	0.43	0.39	0.36	0.33
Other	4.40	4.24	4.73	5.61	6.13	6.83	7.55	8.33	9.18
Developing countries and territories									
Western Hemisphere	9.31	9.38	8.55	5.69	6.14	6.70	7.12	7.51	7.97
North Africa	9.86	27.97	39.03	22.71	26.67	28.28	29.71	31.04	32.34
Arid Africa	0.99	2.09	2.03	2.36	3.05	3.70	4.30	4.82	5.30
Other Africa	5.12	7.85	12.35	15.42	18.99	22.55	25.84	28.65	31.47
Middle East	56.39	58.34	61.84	55.27	57.35	61.98	65.48	68.11	70.61
Indian subcontinent	1.01	1.22	1.25	1.44	1.65	1.75	1.81	1.84	1.86
Asian exporters of manufactures	1.45	1.55	1.18	1.07	0.90	0.78	0.70	0.64	0.57
Other Asia	7.94	7.77	9.27	9.85	11.04	11.91	12.72	13.45	14.16
Socialist countries									
Eastern Europe						••			
Asia									

Note: For sources, definition of country groups and methodology, see explanatory notes to annex B.

## ANNEX TABLE B.4

# Manufacturing: actual and projected shares in GDP by region, 1960-2000

(In percentages)

Region	1960	1965	1970	1975	1980	1985	1990	1995	2000
Developed market-economy countries					,		Ì		
North America	22.85	25.04	23.88	22.97	24.05	24.21	24.41	24.60	24.78
Western Europe	<b>a</b> a (a			00.00					
North	28.63	30.00	31.75	30.60	31.28	31.26	31.27	31.26	31.25
South	22.21	24.72	27.24	28.61	29.94	30.69	31.47	32.22	32.96
Japan	27.26	26.22	28.96	27.94	30.85	31.62	32.42	33.19	33.97
Other	22.23	22.92	23.07	21.43	21.37	21.91	22.47	23.00	23.52
Developing countries and territories									
Western hemisphere	20.92	22.01	23.82	25.45	27.01	28.85	30.93	32.98	35.08
North Africa	12.26	11.15	10.21	11.77	12.05	13.01	14.01	15.00	16.00
Arid Africa	4.65	5.49	7.66	8.09	8.07	8.71	9.66	10.86	12.24
Other Africa	6.48	7.97	9.27	10.18	10.73	11.36	12.19	13.23	14.31
Middle East	5.97	6.09	6.59	7.93	8.00	7.65	7.51	7.55	7.58
Indian subcontinent	12.19	14.81	45.00	14.94	18.27	20.59	23.13	25.76	28.49
Asian exporters of manufactures	13.21	15.91	24.16	29.59	35.05	37.86	40.21	42.40	44.59
Other Asia	10.98	12.08	13.28	15.17	17.07	19.07	21.09	23.11	25.17
Socialist countries									
Eastern Europe	46.00	48.60	51.10	52.70	54.25	55.75	57.13	58.41	59.63
Asia	32.16	43.40	47.99	53.29	55.96	59.42	63.05	66.52	69.78

# Construction, utilities, transport and services, actual and projected shares in GDP by region, 1960-2000 (In percentages)

Region	1960	1965	1970	1975	1980	1985	1990	1995	2000
Developed market-economy countries									
North America	69.14	68.02	69.57	70.93	70.68	70.93	71.14	71.32	71.4
Western Europe									1
North	62.58	62.81	62.09	63.93	64.05	64.56	65.00	65.41	65.8
South	59.29	59.53	59.44	58.97	58.87	59.28	59.58	59.81	59.9
Japan	58.89	63.68	64.43	66.21	64.44	64.29	64.06	63.77	63.4
Other	64.36	65.13	65.15	66.17	66.11	65.62	65.03	64.32	63.5
Developing countries and territories									
Western hemisphere	52.83	52.49	54.01	56.89	56.62	56.04	55.21	54.11	52.8
North Africa	50.79	40.48	36.94	49.93	48.65	48.43	47.99	47.31	46.4
Arid Africa	33.96	38.87	42.74	47.91	48.82	50.65	53.01	55.54	58.0
Other Africa	38.61	40.26	40.68	41.97	42.35	42.13	41.95	41.78	41.3
Middle East	25.64	25.71	24.09	30.66	29.78	26.63	24.17	22.21	20.3
Indian subcontinent	35.19	39.78	39.07	41.24	44.69	47.53	50.07	52.19	54.0
Asian exporters of manufactures	56.82	57.45	55.78	54.88	53.12	52.84	52.32	51.57	50.7
Other Asia	39.47	41.62	42.63	44.50	45.66	47.03	47.94	48.43	48.6
Socialist countries									
Eastern Europe	29.00	26.40	31.20	31.00	31.27	31.59	31.82	31.97	32.1
Asia	21.41	20.27	19.34	20.04	21.37	22.06	22.53	22.78	22.9

# World trade by commodity group: projected shares in 1990 (In percentages)

\_

		Desti	nation		
Origin	Developed market- economy countries	Developing countries	Socialist countries of Eastern Europe	Socialisi countries of Asia	Total exports
Food and bever	ages (SITC	C 0+1)			
Developed market-economy countries	46.13	12.94	5.11	2.95	67.14
Developing countries	15.77	8.02	1.62	0.63	26.05
Socialist countries of Eastern Europe	1.54	1.57	0.00	0.00	3.11
Socialist countries of Asia	1.68	2.03	0.00	0.00	3.71
Total imports	65.12	24.56	6.74	3.58	100.00
Trade balance	2.01	1.49	- 3.63	0.13	0.00
Raw materia	ls (SITC 2	+4)			
Developed market-economy countries	48.97	9.24	2.80	0.31	61.32
Developing countries	16.58	7.94	3.59	1.42	29.53
Socialist countries of Eastern Europe	5.85	1.88	0.00	0.00	7.73
Socialist countries of Asia	0.94	0.48	0.00	0.00	1.42
Total imports	72.35	19.53	6.40	1.73	100.00
Trade balance	-11.02	10.00	1.33	-0.31	0.00
Fuels	(SITC 3)				
Developed market-economy countries	12.46	0.97	0.03	0.01	13.49
Developing countries	54.60	25.15	0.31	0.34	80.39
Socialist countries of Eastern Europe	5.25	0.41	0.00	0.00	5.66
Socialist countries of Asia	0.40	0.06	0.00	0.00	0.46
Total imports	72.72	26.59	0.34	0.36	100.00
Trade balance	- 59.23	53.81	5.31	0.11	0.00
Manufactured g	oods (SITC	C 5-9)			
Developed market-economy countries	40.24	33.11	2.17	1.02	76.54
Developing countries	6.87	8.46	1.16	0.02	16.51
Socialist countries of Eastern Europe	1.34	3.66	0.00	0.00	5.00
Socialist countries of Asia	0.39	1.57	0.00	0.00	1.96
Total imports	48.83	46.80	3.33	1.04	100.00
Trade balance	27.70	- 30.29	1.68	0.91	0.00

Actual and projected rates of growth of the male labour force by region, 1960-2000 (In percentages)

Region	1960- 1965	1965- 1970	1970- 1975	1975- 1980	1980- 1985	1985- 1990	1990- 1995	1995- 2000
Developed market-economy countries								
North America	1.0	1.3	1.4	1.3	1.0	0.7	0.8	0.8
Western Europe								
North	0.5	0.0	0.5	0.2	0.4	-0.0	- 0.0	0.1
South	0.4	0.2	1.1	0.9	1.0	0.7	0.8	0.9
Japan	1.9	1.7	1.3	0.6	0.5	0.6	0.6	0.3
Other	1.7	1.9	1.9	1.8	1.5	1.7	1.9	2.0
Developing countries and territories								
Western hemisphere	2.0	2.1	2.4	2.5	2.5	2.5	2.5	2.6
North Africa	1.5	1.5	2.5	3.0	3.0	2.8	2.8	2.8
Arid Africa	2.1	2.1	2.1	2.2	2.3	2.4	2.4	2.6
Other Africa	2.3	2.5	2.4	2.5	2.6	2.6	2.6	2.6
Middle East	2.3	2.6	2.5	2.6	2.8	3.0	3.1	3.2
Indian subcontinent	1.4	1.7	2.0	2.2	2.2	2.2	2.3	2.4
Asian exporters of manufactures	2.1	1.8	3.0	2.9	2.3	1.7	1.6	1.4
Other Asia	1.7	2.2	2.4	2.5	2.5	2.5	2.5	2.3
Socialist countries								
Eastern Europe	0.8	0.8	1.4	1.3	0.9	0.6	0.3	0.7
Asia	1.8	1.8	1.6	1.2	1.2	1.4	1.3	1.1

Note: For sources, definition of regions and methodology, see explanatory notes to annex B.

### ANNEX TABLE B.8

Actual and projected rates of growth of the female labour force by region, 1960-2000

(In percentages)

Region	1960- 1965	1965- 1970	1970- 1975	1975- 1980	1980- 1985	1985- 1990	1990- 1995	1995- 2000
Developed market-economy countries								
North America	3.1	3.2	2.2	1.8	1.3	1.2	1.3	1.5
Western Europe								
North	1.3	0.9	1.1	0.7	0.7	0.3	0.4	0.6
South	1.0	0.8	1.6	1.4	1.5	1.3	1.4	1.5
Japan	2.1	1.8	1.7	1.1	1.0	1.1	1.1	0.6
Other	6.1	5.4	2.3	2.5	1.9	2.5	2.9	2.6
Developing countries and territories								
Western hemisphere	3.5	3.6	3.5	3.5	3.8	3.7	3.8	3.8
North Africa	3.1	3.2	3.7	4.0	4.0	3.8	4.0	4.1
Arid Africa	1.9	1.8	1.8	2.0	2.1	2.2	2.2	2.3
Other Africa	2.0	2.1	2.1	2.1	2.3	2.3	2.5	2.5
Middle East	3.8	4.1	4.0	4.0	4.3	4.4	4.6	4.5
Indian subcontinent	1.9	2.2	1.7	1.8	1.9	2.0	2.4	2.5
Asian exporters of manufactures	5.5	5.1	3.1	2.6	2.1	1.8	2.1	2.1
Other Asia	2.4	2.8	2.1	2.0	2.1	2.1	2.3	2.2
Socialist countries								
Eastern Europe	0.8	0.7	1.1	0.8	0.5	0.5	0.1	0.9
Asia	1.5	1.6	1.4	1.1	1.3	1.4	1.5	1.3

Sectoral composition of GDP by major country groups, 1960-1980 and projections to 2000 (Percentages)

	Developed market-economy countries					Developing countries					Soc	stern	Socialist countries of Asia <sup>a</sup>							
Sector	1960	1970	1980	1990	2000	1960	1970	1980	1990	2000	1960	1970	1980	1990	2000	1960	1970	1980	1990	2000
Agriculture	7.0	5.1	4.1	3.3	2.6	30.5	22.6	16.5	11.2	7.3	25.0	17.7	14.5	11.1	8.4	46.4	32.7	22.7	14.4	7.7
Mining	2.7	2.1	1.7	1.5	1.4	11.6	16.6	15.4	17.0	18.7							••			
Manufacturing	25.1	27.3	27.8	28.4	29.1	14.2	16.6	20.1	23.8	27.1	46.0	51.1	54.2	57.1	59.5	32.2	47.9	55.9	63.0	69.5
Other	65.2	65.5	66.4	66.8	66.9	43.7	44.2	48.0	48.0	46.9	29.0	31.2	21.3	31.8	32.1	21.4	19.4	21.4	22.6	22.8

Note For sources, definition of country groups and methodology, see explanatory notes to annex B <sup>a</sup> Fully comparable data do not exist for the socialist countries. For those countries the mining sector is included in manufacturing

ANNEX TABLE B.10

Shares in world GDP by sector and main country groups, 1960-1980 and projections to 2000 (In percentage)

	Developed market-economv countries					Developing countries					Soc	alısı co	itern	Socialist countries of Asia <sup>a</sup>						
Sector	1960	1970	1980	1990	2000	1960	1970	1980	1990	2000	1960	1970	1980	1990	2000	1960	1970	1980	1990	2000
Agriculture Mining		34.5 41 <i>.</i> 8					26.8 58.2				22.7	23.8	26.1	25.0	23.9	14.1	14.9 	14.1 	14.3	13.5
Manufacturing	67.6	62.5	55.8	48.4	40.1	6.2	6.7	9.2	13.6	19.2	21.2	23.3	25.8	25.6	23.7	5.0	7.5	9.2	12.4	17.0
Other	83.1	81.0	76.8	71.1	64.1	9.0	9.6	12.6	17.1	23.1	6.3	7.7	8.6	8.9	8.9	1.6	1.7	2.0	2.9	3.9

Note For sources, definition of country groups and methodology, see explanatory notes to annex B

\* Fully comparable data do not exist for the socialist countries For those countries the mining sector is included in manufacturing

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